

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



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March 31, 1993

DATE REPORT ACCEPTED April 22, 1993

DISPOSITION SEA - (no targets)

SAM SIGNATURE Cynthia R. Gunley

Mr. Brain Farrier
EPA CERCLA PA/SI Regional Project Officer
Region IV, US EPA
Atlanta, Georgia 30365

Field Offices:

EPA ID # ALD004025193
Reference # 5818

RE: Preliminary Assessment for Simsko Incorporated
Shelby County, Alabama

Dear Mr. Farrier:

Enclosed is the Preliminary Assessment Report for Simsko Incorporated (Simsco) located in Shelby County, Alabama. Included is information collected during the investigation of this site. Please consider the following major points when evaluating this facility.

1. Simsko Incorporated was sold to Citation Corporation in 1984 and was renamed Citation Foam Casting Company (Citation). The facility has always been utilized to produce ductile iron castings.
2. The sand molding portion of the facility was closed in November 1992 and the remainder of the facility is still in operation. The facility employs 66 people.
3. The facility is not located in an area of recharge and susceptibility to surface contamination for the Knox - Shady aquifer which is the major aquifer in southeast Shelby county. The site is not located in an area of karst terrain.
4. The municipal wells which serve the 4 mile study area are located well outside of the study area. No private wells have been located within a 4 mile radius of the facility.

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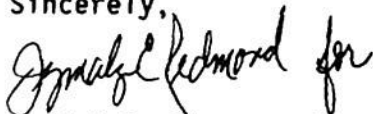
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5. Columbiana Middle School, the nearest school to the facility, is located approximately 1320 feet northeast of the facility. Columbiana Vocational School is located approximately 3750 feet west southwest of the site and Elvin Hill Elementary School is located approximately 6200 feet east southeast.
6. Analytical test results of waste present in an on-site landfill indicate that the materials are not hazardous wastes. However, the analytical results do not conclusively indicate the presence or absence of hazardous substances.
7. Storm water has been observed running off of the on-site landfill directly into a drainage ditch which discharges to an unnamed tributary of Town Creek.
8. An estimated 370 cubic yards of waste is present on-site. Approximately 340 cubic yards of waste have been removed from the facility grounds.
9. No sensitive wetlands or environments have been identified along the surface water pathway. Endangered species have not been identified within a 4 mile radius of the site.
10. One local fishing area has been identified within the 15 mile downstream surface water pathway.

Based on the information obtained during this Preliminary Assessment, we feel that the site evaluation has been accomplished (SEA). Should you have any questions concerning this evaluation, please do not hesitate to contact Jymalyn Redmond or Dell Montgomery at (205) 260-2777.

Sincerely,


Daniel E. Cooper, Chief
Special Projects

DEC/DM/

Enclosure

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REFERENCES

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DATE REPORT ACCEPTED

April 22, 1993

DISPOSITION

SEA

SAM SIGNATURE

Cynthia T. Goley

Date: January 3, 1993

Prepared By: Alabama Department of Environmental Management

Site: Simsco Incorporated
130 Industrial Park Road
Columbiana, Alabama 35051

EPA ID No.: ALD004025193

Reference No.: 5818

1.0 Introduction

Under authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA) and a cooperative agreement between the U. S. Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM), a Preliminary Assessment (PA) was conducted at the old Simsco Incorporated (Simsco) facility in Columbiana, Alabama. The purpose of this investigation was to collect information concerning conditions at the Shelby County site sufficient to assess the threat posed to human health and the environment and to determine the need for additional investigation under CERCLA/SARA or other action. The scope of the investigation included review of available file information, a comprehensive target survey and an on-site reconnaissance.

2.0 Site Description, Operational History and Waste Characteristics

2.1 Location

The facility is located at 130 Industrial Park Columbiana, Alabama 35051. The geographic coordinates of this Shelby County site are latitude 33° 10' 52" North and longitude 86° 36' 36" West (Attachment 2). (These site coordinates were taken manually utilizing the Columbiana, Alabama 7.5 minute United States Geological Survey (USGS) Topographic Quadrangle Map (Attachment 1).) The facility is located within the Northwest 1/4 of Section 26, and the Southwest 1/4 of Section 23, Township 21 South, Range 1 West (Attachment 1, 2, Reference 2).

To reach the facility follow Interstate 65 north to Shelby County and turn right on to Highway 25. Follow 25 northeast approximately 9 miles to County Road 34 and turn left. Cross a set of rail road tracks, take the first road on the left and follow it to the facility located on the right (Attachment 3, Reference 14).

The facility is located approximately 4040 feet (0.77 miles) northwest of Columbiana, Alabama (Attachment 3).

The climate in Shelby Count is humid subtropical, with hot humid summers and cool, short winters. The average annual precipitation is 55.53 inches, and the average annual temperature is 62.2 °F (Reference 2). The average annual daily precipitation is estimated to be approximately 0.15 inches (55.53 inches\360 days).

The mean relative humidity is 70 % (Reference 3, p. 62) and the pan and lake evaporation rate is 42 inches (Reference 3, p. 63).

2.2 Site Description

The facility grounds consist of approximately 7.4 acres with a slope of 2 to 5 %. The facility office is located east of the facility on a hill (Attachment 4, Reference 14).

The area within a 1 mile radius of the site is used primarily for small business, light industrial, and residential purposes (Reference 14).

One drainage ditch, three baghouses and an area containing process wastes were noted at the facility. (Reference 14).

The drainage ditch begins on the west side of the main manufacturing facility, turns east to pass behind the building and discharges into an unnamed tributary of Town Creek (Reference 14, Attachment 8,4,1). The ditch is approximate two feet wide and approximately 820 feet long (Reference 14, Attachment 1).

The area containing process wastes is located at the rear of the main manufacturing facility to the northeast and is adjacent to the drainage ditch. The area is approximately 100 feet long and 100 feet wide and is approximately 1 to 2 feet deep (Reference 14, Attachment 1).

Two baghouses are located at the rear of the facility to the north and a third baghouse is located on the east side of the facility (Attachment 4). Storm water from these baghouses was observed flowing directly into the drainage ditch (Reference 14).

No areas of stressed vegetation have been noted at the site (Reference 14).

Structures at the facility include:

- A Main Manufacturing Facility
- A Separate Brick Office Building
- Three Warehouses
- Three Baghouses
- Three Cooling Towers (Non-Contact Cooling Water)

(Attachment 4, Reference 14)

The facility is surrounded by a fence containing at least three secured gates (Reference 14, Attachment 4). Armed guards are maintained at the facility (Reference 14).

2.3 Operational History and Waste Characteristics

Simsco was opened in 1964 and was purchased, in 1984, by Citation Corporation from McWane Cast Iron and Pipe Co. During March 1992 the facility name was changed to Citation Foam Casting Company (Citation) to reflect a shift from green sand molding to evaporative pattern casting (or lost foam molding). The sand molding portion of the facility was closed in November 1992 and the remainder of the facility is still in operation (Reference 4). (Both Citation Corporation and McWane Cast Iron and Pipe Co. have main offices located in Birmingham, Alabama.)

The facility has always manufactured ductile iron castings and currently the general manager of Citation is Charles Armor (Reference 10, Reference 4).

A number of regulatory permits have been issued to the facility throughout its operational history by the ADEM Air Division. Several of the permits were voided when the facility manufacturing processes were changed and several of the permits were replaced to reflect the company name change (Reference 11). Each of the currently active permits, along with their pertinent dates, is given below:

Permit for Metal Inoculation with Baghouse :

Permit No.	:411-0031-Z001
Date of Issuance	:May 12, 1992

Permit for Two Electric Induction Furnaces (Ea. 4.67 TPY):

Permit No.	:411-0031-Z002
Date of Issuance	:May 12, 1992

Permit for a Sand Reclamation/Mold Handling System (25TPH) with Baghouse:

Permit No.	:411-0031-X006
Date of Issuance	:May 12, 1992

Permit for Two Induction Furnaces (2.25 TPH):

Permit No.	:411-0031-X008
Date of Issuance	:May 12, 1992

Permit for Magnesium Ductile Treatment Process (2.35 TPH):

Permit No.	:411-0031-X009
Date of Issuance	:May 12, 1992

Permit for Goff Hanger Table Shotblast (1.2 TPH) with Baghouse:

Permit No. :411-0031-X0010
Date of Issuance :May 12, 1992

On April 21, 1992 the ADEM Solid Waste Branch notified the Citation that it would approve a solid waste disposal permit (No. 59-04R) for landfill disposal of non hazardous solid waste (Attachment 7).

Citation has recently applied for a storm water runoff permit from the ADEM Water Division (Reference 15, Attachment 8).

On April 26, 1988 the ADEM Air Division issued a Notice of Violation (NOV) to Simsco for failure to obtain an Air Permit for operation of a "lost foam"/expanded polystyrene (EPS) molding and sand reclamation system (Attachment 5).

The U.S. EPA sent a letter, dated December 2, 1985, to Simsco, Inc. requesting that the company submit information pursuant to the enforcement of the provisions of RCRA Section 3007, Subtitle C of RCRA, 42 U.S.C 6927 (Attachment 6).

No further documentation of any regulatory activity or permitting has been located.

Specific types of materials handled at the facility are include below:

Molding Sand
Castings
Expanded Polystyrene Sand (ESP)
Steel Scrap
Iron Returns
Graphite
Magnesium (Used in Ductile Treatment)
Refractory Coating (Non Hazardous, Inorganic Material)

(Reference 15)

Specific waste streams produced at the facility are given below:

Particulate Emissions
Baghouse Dust
Furnace Slag
Foundry Sand
Non Contact Cooling Water
Storm Water

(Reference 15)

The particulate emissions produced by Citation are regulated by the permits listed above and were regulated prior to the facility name change.

Baghouse dust, foundry slag, and molding sand have been dumped on-site throughout the operational history of the facility (Reference 15). While the exact amounts of waste materials disposed of on-site are unknown, two permit applications from the ADEM Air Division files indicate approximate amounts of on-site baghouse dust landfilled in 1990. The pertinent application information is listed below:

Application submitted 3-28-90

Waste material - Sand and Cast Iron Fines

Volume - 30 Cubic Yards per Month

Name of unit creating the waste - EPS Casting Sand System and Wheelabrator

Method of disposal - Landfill

Destination of disposal - On premises

Application submitted 10-04-90

Waste material - Cast Iron and Steel Fines

Volume - 0.6 Cubic Yards per Month

Name of unit creating the waste - Goff Hanger Table

Method of disposal - Landfill

Destination of disposal - On premises

The baghouse dust, foundry slag, and molding sand produced today, by Citation, will be disposed of at the Sheala Landfill following the requirements of the permit mentioned above. Citation has been approved to dispose of approximately 25 cubic yards of solid waste material monthly (Reference 15, Attachment 7).

Analytical test results, obtained in August 1991 and submitted with the permit listed above, indicate that the waste stream does not contain hazardous wastes (Attachment 7). However, the analytical results do not conclusively indicate the presence or absence of hazardous substances (Attachment 7). The wastes tested were taken from the area on-site containing process wastes (Reference 14).

At least 340 cubic yards of waste material have been removed from the on site landfill and disposed of at the Shelby County (or Sheala) landfill. Additional removals are currently on going (Reference 14).

Both the non-contact cooling water and storm water runoff are carried off-site by the ditch described in section 2.2. As mentioned above, Citation has applied for a storm water discharge permit which will incorporate both waste streams (Attachment 8). The water carried by the ditch has not been previously permitted (Attachment 8) nor has the waste water ever been tested (Reference 15).

No documentation of on-site spillage has been located.

3.0 Ground Water Pathway

3.1 Hydrogeologic Setting

The site is underlain by the Floyd Shale of Mississippian age. The Floyd Shale unconformably overlies the Fort Payne Chert in Shelby County and consists of gray to olive-green, thinly fissile to crumbly clay shale with interbedded, massive to lens-shaped, fine-grained, green to gray sandstone. The Floyd Shale is typically found in valleys adjacent to ridges comprised of the more resistant Fort Payne Chert and Parkwood Formation. The thickness of the Floyd Shale is up to 2000 feet in Alabama, but is expected to be less than 300 feet in the vicinity of the site (Reference 2).

The structural geology of Shelby County is complex due to intense structural deformation during the Appalachian orogeny. Numerous folds and thrust faults are present throughout the country. These folds and faults generally trend northeast to southwest (Reference 2).

According to the Area 4 Report, the site is not located in an area of recharge and susceptibility to surface contamination for the Knox-Shady aquifers, the major aquifer in southeast Shelby county. However, the Talladega-Cartersville Fault is less than 1 mile south and southeast of the site. This fault exposes the Cambrian age Kehatchee Mountain Group undifferentiated adjacent to the Mississippian age Floyd Shale and may influence the hydrogeology of the surrounding area (Reference 2). The underlying formations present on each side of the Cartersville Fault are poor aquifers and there is a slim possibility that contaminants from the site would leach to the fault (Reference 16).

The residual (or surface) aquifer is the most prominent local aquifer at the site and it flows approximately south southwest (Reference 16). The depth to this aquifer is approximately 20 feet or less (Reference 16). An private wells located within a 4 - mile radius of the site would draw water from the local residual aquifer (Reference 16).

One sink hole is noted as being located within the city limits of Columbiana and approximately one (1) mile southeast of the site. This sink hole is noted in the U.S. Geological Survey and Alabama Highway Department map entitled "Area In Which Sink holes Have Occurred Or Can Occur In Shelby County, Alabama", 1977, as having had or is continuing to have subsidence since 1940. Aside from this one sink hole, the area surrounding Columbiana is not located in an area which is highly susceptible to sink hole development (Reference 2, Figure 3). The area of the site does not contain karst terrain (Reference 2; figure 3, Reference 16).

The sink hole, mentioned above, occurred about 1968 and was caused by continuous pumpage of 2 Columbiana city wells for 2 years. The pumping resulted in the removal of sediment by turbulent flow around the wells. The wells were abandoned soon after the sink hole began to appear (Reference 17, Attachment 1).

Soils at the site are of the Townley-Sunkight complex. This complex consists of moderately deep and shallow, undulating to steep, well drained soils that have a clayey or loamy subsoil, formed in residuum of shale and siltstone (Reference 2).

Townley soils typically have 5 inches of yellowish brown silt loam at the surface. The subsoil is string brown silt loam that extends to a depth of 10 inches. Mottled yellowish red clay extends to 30 inches with the underlying 10 plus inches being mottled, brownish yellow silty clay over tilted, weathered shale and siltstone. Townley soils are strongly acid or very strongly acid (pH 5.5 to 4.5) and low in natural fertility. The slope in which these soils are usually found is 12 to 35% (Reference 2).

Sunlight soils typically have a surface layer that is a dark grayish brown channey silt loam that is about 2 inches thick. The subsoil is yellowish brown channey silt loam that extends to a depth of about 5 inches and a depth of 12 inches. The parent material is shaley siltstone. Sunlight soils are strongly acid or very strongly acid (pH 5.5 to 4.5), low in natural fertility, and low in organic matter content. Permeability of these soils is moderate, water capacity low, and erosion is a hazard by cutting, filling and grading (Reference 2).

The depth to bedrock with these soils is generally less than 5 feet and depth to seasonal high groundwater is greater than 6 feet (Reference 2).

3.2 Ground Water Targets

No private wells have been identified within a 4 - mile radius of the facility (Reference 14). The Columbiana Water Works serves water to the area within a 4 - mile radius of the facility (Reference 12, 14).

The water works serves municipal water to the city of Columbiana and to 3 farmer home systems (Reference 12). Each system along with it's number of service connections is given below:

System	Service Connections
Columbiana Water Works	1800
Little Waxie Water Authority*	300
Spring Creek Water System*	1400
Bethel Water System*	900
Total	4400

* Farmer Home System

Total No. of Service connections = 4400

(Reference 12).

The approximate total number of people served by the Columbiana Water Works is 11924 (4400 Service Connections x 2.71 Persons/Household (See section 5.2)).

The water works is a blended system, owns four ground water wells, does not own any surface water intakes, and does not purchase water (Reference 5, 12). Each ground water well is located from approximately 6.5 to 9 miles south or south southeast of the facility and each draws water from the limestone formation of the Shady-Knox aquifer (Attachment 1, Reference 18 (plate 1), Reference 16). The wells supply Columbiana with 100 % of it's municipal drinking water (Reference 5).

The wells of the Columbiana Water Works are not considered to be ground water targets in this PA for the following reasons:

1. The municipal wells are located well outside of the 4 mile radius study area.
2. The wells which serve Columbiana draw water from the limestone formation of the Knox-Shady aquifer.
3. The site is not located in an area of recharge and susceptibility to surface contamination for the Knox-Shady aquifer, the major aquifer in southeast Shelby county.

The nearest drinking water well is a Columbiana municipal well and it is located approximately 6.5 miles south of the facility (Attachment 1, Reference 14).

3.3 Ground Water Conclusions

The following items have been considered to determine the possibility of a release of hazardous substances to ground water :

1. The wells of the Columbiana Water Works are not considered to be ground water targets in this PA.
2. No private wells have been identified within a 4 mile radius of the facility.
3. The area of the site does not contain karst terrain.
4. The underlying formations present on each side of the Cartersville Fault are poor aquifers and there is a slim possibility that contaminants from the site would leach to the fault.
5. The facility site is not located in an area of recharge and susceptibility to surface contamination for the Knox - Shady aquifers.

Based on the items listed above a release of hazardous substances to ground water is not suspected.

4.0 Surface Water Pathway

4.1 Hydrologic Setting

The drainage ditch, described in section 2.2, carries water approximately 820 feet from the facility to the Probable Point of Entry (PPE), an unknown tributary of Town Creek (Reference 14, Attachment 4, Attachment 1). Storm water has been observed discharging directly into the ditch from the area containing wastes described in section 2.2 (Reference 14). Discolored materials, which appeared to be baghouse catch, were observed entering the stream with stormwater runoff from the site (Reference 14).

Water flows approximately 5400 feet (1.02 miles) from the PPE, to the Waxahatchee Creek and continues along the creek to the end of the 15 mile surface water pathway (Attachment 1). An approximately 850 foot long sewage disposal pond is located approximately 10900 feet (2.06 miles) from the PPE along the surface water pathway (Attachment 1).

No water flow information is available for either the Waxahatchee Creek or the unnamed tributary of Town Creek.

The facility has a topographic elevation of 540 feet and is not located within a floodplain (Attachment 1, Reference 8).

4.2 Surface Water Targets

No drinking water intakes exist along the 15 mile surface water pathway identified in section 4.1 (Reference 12).

No stream use classification information is available for the unknown tributary containing the PPE. However, the Waxahatchee Creek stream use classifications are given below:

From	To	Classification
Coosa River (Lay Lake)	Camp Branch	Fish And Wildlife
Camp Branch	Southern RR Crossing	Agriculture and Industry
Southern RR Crossing	It's Source	Fish And Wildlife

(Reference 7; section 335-6-11.02; p.11-14, Attachment 1)

No wetlands have been identified 15 miles downstream of the PPE (Attachment 1). However, one community fishing area, known as Sawyer Cove, has been identified along the Waxahatchee Creek (Reference 14, Attachment 1).

No federally endangered species have been identified along the 15 mile surface water pathway or within a 4 - mile radius of facility. However, the following animals include all of Alabama in their established general range:

Florida panther
Bald Eagle (*Haliaeetus leucocephalus* (Linnaeus)) :
Backman's warbler
Red-Cockaded Woodpecker (*Picoides borealis* Vieillot) :

(Reference 13; section 1.4)

No overland sensitive environments have been identified along the 15 mile surface water pathway or within a 4 - mile radius of the facility.

4.3 Surface Water Conclusions

The following items have been considered to determine the possibility of a release of hazardous substances to surface water :

1. Storm water has been observed discharging directly into the drainage ditch from the area containing wastes.
2. The analytical results obtained from wastes noted above do not conclusively indicate the presence or absence of hazardous substances.
3. Neither the storm water nor the cooling tower blow down, carried by the drainage ditch, has ever been analyzed.
4. One community fishing area, known as Sawyer Cove, has been identified along the Waxahatchee Creek.
5. Annual rainfall is heavy in the area.
6. No drinking water intakes exist along the identified 15 mile surface water pathway.

Based on the items listed above a release of hazardous substances to surface water is suspected.

5.0 Soil Exposure and Air Pathways

5.1 Physical Conditions

The grounds surrounding the main manufacturing facility and warehouses are a mix of soil and gravel. Areas along the edge of the facility are vegetated with weeds, grass and small wooded patches. The facility office is surrounded by grass (Reference 14).

The main manufacturing facility, including the process waste area mentioned in section 2.2, is secured by a fence containing at least three secured gates. Armed guards are maintained at the facility (Reference 14, Attachment 4).

5.2 Soil and Air Targets

The facility is active and currently employs 66 people (Reference 14).

The nearest residence (owner unknown) to the facility is located approximately 270 feet (0.050 miles) northwest of the facility and approximately 250 feet (0.047 miles) north of the process waste area mentioned in section 2.2 (Reference 14, Attachment 1).

Columbiana Middle School, the nearest school, is located approximately 1320 feet (0.25 miles) northeast of the facility. Columbiana Vocational School is located approximately 3750 feet (0.71 miles) west southwest of the site and Elvin Hill Elementary School is located approximately 6200 feet (miles 1.17) east southeast (Reference 14, Attachment 1)

The total population within a 4 - mile radius of the facility is approximately 2566.37 people. The population is described below:

Miles	Residences	X	People/Residence	=	Population
0-1/4	38		2.71		102.98
1/4-1/2	63		2.71		170.73
1/2-1	220		2.71		596.20
1-2	385		2.71		1043.35
2-3	109		2.71		295.39
3-4	132		2.71		357.72
Totals	947		----		2566.37

(The population information given above was obtain from a map house count utilizing the USGS Quadrangle maps of Attachment 1. The number utilized in the People/Residents column is the number of persons per household taken for the 1990 Census of Alabama Counties and Cities By Race (Table 1).)

No overland terrestrial sensitive environments or wetlands have been identified (Attachment 1).

Information about the federally endangered species found within the study area is given in section 4.2.

5.3 Soil Exposure and Air Pathway Conclusions

As mentioned in section 2.2 of this PA, the site grounds contain an area of process wastes and the area is exposed (Reference 14). Analytical test results indicate that the waste is non hazardous and portions of the landfill have been removed to the Sheala landfill (Attachment 8, Reference 14). However, the analytical results do not conclusively indicate the presence or absence of hazardous substances (Attachment 7). Therefore, it is possible that a direct exposure threat may exist.

During a site reconnaissance of January 21, 1993 no odors were detected to indicate a release of atmospheric contaminants (Reference 14). No documentation of any atmospheric releases has been located.

6.0 Summary and Conclusions

We feel that the site evaluation has been accomplished (SEA) at the facility. This recommendation is based on the items listed below :

1. As indicated in section 3.2 of this PA, the wells of the Columbiana Water Works are not considered to be ground water targets in this assessment.
2. No private wells have been located within a 4 - mile radius of the facility.
3. The facility is not located in an area of recharge and susceptibility to surface contamination for the Knox-Shady aquifer which is the major aquifer in southeast Shelby county. The site is not located in an area of karst terrain.
4. Approximately 340 cubic yards of waste have been removed from the facility grounds. Additional removals of the remain on-site process wastes are currently on going.
5. No sensitive wetlands or environments have been identified along the surface water pathway.
6. Specific endangered species have not been identified within a 4 - mile radius of the site.
7. No residents live within 200 feet of the on-site area containing process waste.

REFERENCES

1. Selected Climatic Maps of the United States, U.S. Department of Commerce, Environmental Science Services Administration, Environmental Data Service 1977 Reprinted October 1984.
2. David M. Lovoy, Hydrogeologist, Groundwater Branch, ADEM Water Division, Memo dated July 13, 1992 to Dan Cooper, Chief Special Projects, Subject; Preliminary Assessment, Simsco Incorporated, Shelby County, Alabama, ALD004025193.
3. Climatic Atlas of The United States, U.S. Department of Commerce, National Climatic Center, Ashville, North Carolina, 1968, Reprinted by the National Oceanic and Atmospheric Administration 1983.
4. Bill Wood, Engineer, Engineering Branch, ADEM Air Division, Memorandum Dated February 12, 1992 To Ron Gore, Chief, Engineering Branch, ADEM Air Division, Subject; Inspection of Simsco.
5. ADEM Federal Reporting System (FRDS - II): Columbiana Water Works, Taylor Water System.
6. Vertebrate Animals of Alabama in Need of Special Attention. Ed. Robert H. Mount. Auburn University: Alabama Agricultural Experiment Station, 1986.
7. Alabama Department of Environmental Management, Water Division - Water Quality Program, Water Use Classification.
8. Maps of Flood Prone Areas:
Columbiana Northwest, 1976,
Columbiana Northeast, 1976,
Maps prepared by Alverson and Associates and based on U.S. Geological Survey of 1909.
9. Phillip Gray, Citation Corporation, Letter dated March 4, 1992 to Bill Wood, Engineer, ADEM Air Division, Engineering Branch, Subject; Simsco Name Change.
10. Alabama Industrial Directory 1991-1992, Published by The Alabama Development Office.
11. Richard E. Grusnick, Chief, ADEM Air Division, Letter dated May 12, 1992 to Phillip Gray, Citation Corporation, Birmingham, Alabama, Subject; Facility Permits.

12. Nelson Lathan, Manager, Columbiana Water Works, Telecommunications with Dell Montgomery, Site Assessment Unit, ADEM Special Projects, On October 30, 1992, Subject; Columbiana Water Works water system.
13. Site Investigation Report of November 27, 1991 for Square D - Anderson Plant Located in Leeds, Alabama.
14. Dell Montgomery, Site Assessment Unit, Memorandum of January 21, 1993 to Jymalyn Redmond, Chief, Site Assessment Unit, Subject; Site Inspection Trip Report, Simco Incorporated, Shelby County, Alabama.
15. Phillip Gray, Director of Engineering, Citation Corporation, Telecommunications with Dell Montgomery, Site Assessment Unit, ADEM Special Projects, On January 4, 1993, Subject; Facility Waste Streams and Waste Disposal.
16. David Lovoy, Hydrogeologist, Groundwater Branch, ADEM Water Division, Interview of January 8, 1993 with Dell Montgomery, Site Assessment Unit, Special Projects, Subject; Hydrogeology In And Around Simco Incorporated, Shelby County, Alabama, ALD004025193.
17. William W. Warren, "Sink hole Occurrences In Western Shelby County, Alabama," Geological Survey Of Alabama, Circular 101 (1976), p. 33.
18. Planert, Michael and James L. Pritchett. Geohydrology and Susceptibility Of Major Aquifer To Surface Contamination In Alabama; Area 4. Tuscaloosa, Alabama, 1989.

ADEM

REFERENCE 2



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

July 13, 1992

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MEMORANDUM

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TO: Dan Cooper, Chief
Special Projects Division

FROM: David M. Lovoy, Hydrogeologist *[Signature]*
Groundwater Branch
Water Division

RE: Preliminary Assessment, Simsco Incorporated
Shelby County, Alabama
ALD 004 025 193



The following CERCLA Preliminary Assessment was prepared by the Hydrogeology Unit of the Groundwater Branch at the request of Jymalyn Redmond of the ADEM Special Projects Branch. Research was conducted through a search of the literature and information available in the Groundwater Branch and no site inspection was conducted.

LOCATION

The Simsco Incorporated facility (Simsco) is located within the city limits of Columbiana, Alabama, at 130 Industrial Park Road. The U.S. Geological Survey's 7.5 minute quadrangle map of Columbiana, Alabama gives the location of the facility in the Northwest 1/4 of Section 26, and the Southwest 1/4 of Section 23, Township 21 South, Range 1 West (Figure 1).

SURFACE WATER AND TOPOGRAPHY

Columbiana is located in the Coosa Valley physiographic district of the Alabama Valley and Ridge physiographic section. The area surrounding the Simsco site consists of rolling hills with relief being generally less than 100 feet within one (1) mile of the facility. The Simsco site is located at an elevation of approximately 520 feet above mean sea level. Surface drainage at the site is to an unnamed tributary of Waxahatchee Creek which is a tributary of the Coosa River.

SOILS

Soils at the site are of the Townley-Sunlight complex. This complex consists of moderately deep and shallow, undulating to steep, well drained soils that have a clayey or loamy subsoil, formed in residuum of shale and siltstone (Stevens, 1984).

Townley soils typically have 5 inches of yellowish brown silt loam at the surface. The subsoil is strong brown silt loam that extends to a depth of 10 inches. Mottled yellowish red clay extends to 30 inches with the underlying 10+ inches being mottled, brownish yellow silty clay over tilted, weathered shale and siltstone. Townley soils are strongly acid or very strongly acid (pH 5.5 to 4.5) and low in natural fertility. The slope in which these soils are usually found and thus the slope of the site is 12 to 20%.

Sunlight soils typically have a surface layer that is a dark grayish brown channery silt loam that is about 2 inches thick. The subsoil is yellowish brown channery silt loam that extends to a depth of about 5 inches and a lower part which is extremely channery silty clay loam that extends to a depth of 12 inches. The parent material is shaly siltstone. Sunlight soils are strongly acid or very strongly acid (pH 5.5 to 4.5), low in natural fertility, and low in organic matter content. Permeability of these soils is moderate, water capacity low, and erosion is a hazard (Stevens, 1984).

Urban land is also present at the site. This land includes areas which have been altered by man and include: buildings, garages, sidewalks, streets, parking lots, and areas that have been disturbed by cutting, filling and grading.

The depth to bedrock with these soils is generally less than 5 feet and depth to seasonal high groundwater is greater than 6 feet (Stevens, 1984).

GEOLOGY

The Simsco site is underlain by the Floyd Shale of Mississippian age. The Floyd Shale unconformably overlies the Fort Payne Chert in Shelby County and consists of gray to olive-green, thinly fissile to crumbly clay shale with interbedded, massive to lens-shaped, fine-grained, green to gray sandstone. The Floyd Shale is typically found in valleys adjacent to ridges comprised of the more resistant Fort Payne Chert and Parkwood Formation (Tew, 1986). The thickness of the Floyd Shale is up to 2,000 feet in Alabama, but is expected to be less than 300 feet in the vicinity of Simsco.

The structural geology of Shelby County is complex due to intense structural deformation during the Appalachian orogeny. Numerous folds and thrust faults are present throughout the county. These folds and faults generally trend northeast to southwest (Figure 2).

HYDROGEOLOGY

According to the Area 4 Report, the Simsco site is not located in an area of recharge and susceptibility to surface contamination for the Knox-Shady aquifers, the major aquifer in southeast Shelby County. However, the Talladega-Cartersville Fault is less than 1 mile south and southeast of the site. This fault exposes the Cambrian age Kehatchee Mountain Group undifferentiated adjacent to the Mississippian age Floyd Shale and may influence the hydrogeology of the surrounding area (Tew, 1986).

One sinkhole is noted as being located within the city limits of Columbiana and approximately one (1) mile southeast of the Simsco site. This sinkhole is noted in the U.S. Geological Survey and Alabama Highway Department map entitled "Areas In Which Sinkholes Have Occurred Or Can Occur In Shelby County, Alabama", 1977, as having had or is continuing to have subsidence since 1940 (Figure 3). Aside from this one sinkhole, the area surrounding Columbiana is not located in an area which is highly susceptible to sinkhole development.

The city of Columbiana, according to the Area 4 Report, operates four public water supply wells (Planert and Pritchett, 1989). These wells are located greater than one (4) miles from the Simsco site.

GROUNDWATER USAGE AND QUALITY

According to the Area 4 Report, the nearest public water supply well is located over six (6) miles from the Simsko facility.

CLIMATE

The climate in Shelby County is humid subtropical, with hot humid summers and cool, short winters (Stevens, 1984). The average annual precipitation is 55.53 inches, and the average annual temperature is 62.2 degrees Fahrenheit.

SELECTED REFERENCES

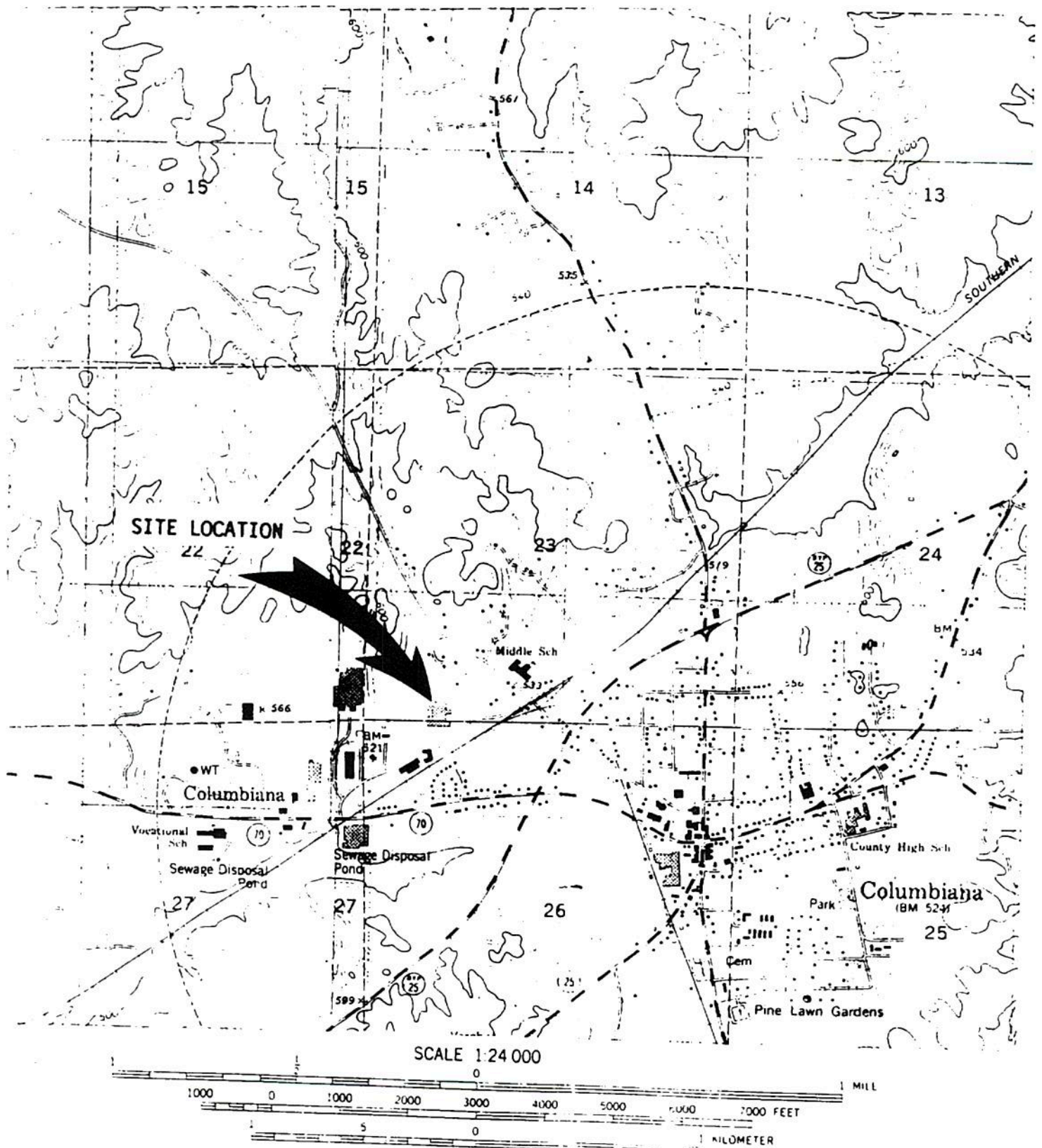
Planert, Michael, and Pritchett, James L., 1989, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 4: U.S. Geological Survey, Water Resources Investigation, Report 88-4133.

Tew, Berry H., 1986, Map 171: Mineral Resources Map of Shelby County: Geological Survey of Alabama.

Stevens, Robert W., 1984, Soil Survey of Shelby County, Alabama, United States Department of Agriculture.

Areas in Which Sinkholes Have Occurred or Can Occur in Shelby County, Alabama, 1977: U.S. Geological Survey in cooperation with the Alabama Highway Department.

COLUMBIANA QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)



CONTOUR INTERVAL 20 FEET

FIGURE 1

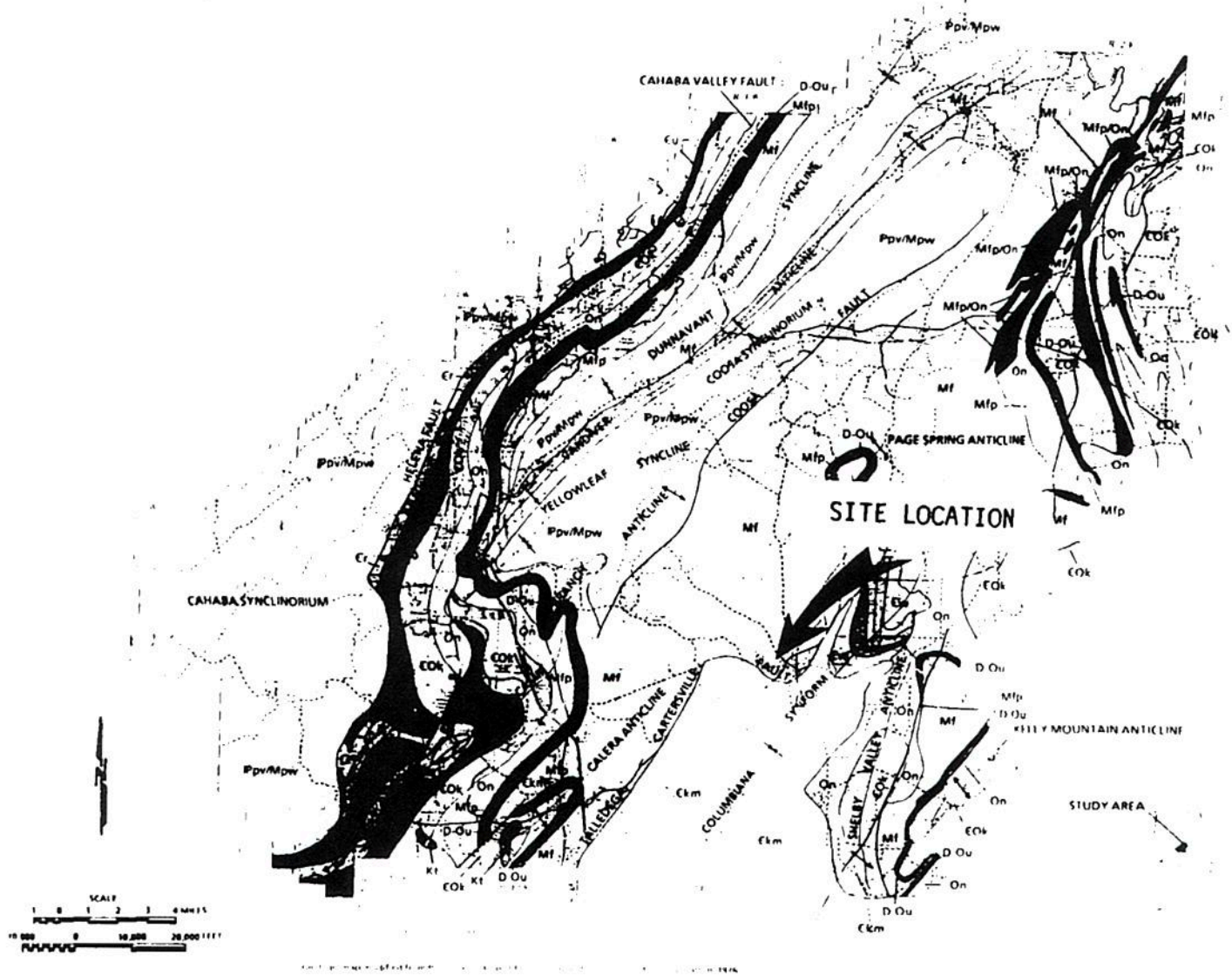


FIGURE 2 Generalized geologic map of Shelby County, Alabama

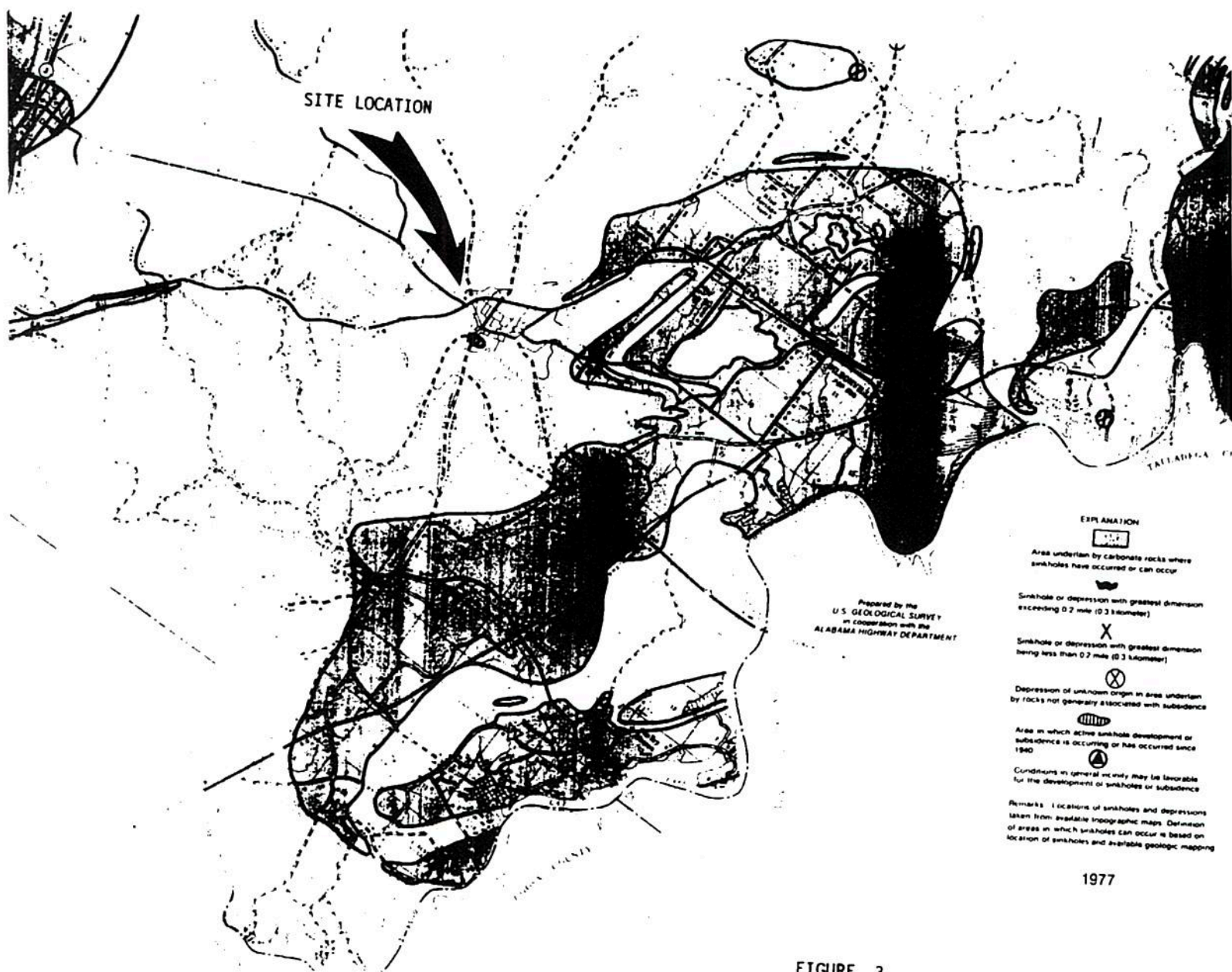


FIGURE 3



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

Guy Hunt
Governor

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Montgomery, AL
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270-5612

February 12, 1992

MEMORANDUM

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(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
3
(205) 479-2336
FAX 479-2593

TO: Ron Gore *RG*
FROM: Bill Wood *BW*
SUBJECT: Inspection of Simsco, Inc. (411-0031)

I conducted an unannounced annual inspection of the Simsco foundry in Columbiana on February 4, 1992. Mr. Brad Castleberry accompanied me on the inspection and explained the recent shutdown of part of the foundry and the company's plans for the immediate future. No emission problems were observed.

This foundry has two different areas or operations. The older part of the foundry includes two electric induction furnaces and metal (ductile) treatment hoods (Z001) and a "green" sand recycling/castings cleaning system (Z005). The newer section, where ductile iron castings are produced by the EPS "lost foam (polystyrene)" system, includes a sand reclamation system (X006), a Wheelabrator shotblast (X007), two (smaller) electric induction furnaces (X008), metal treatment (X009), and a Goff shotblast (X010).

In November 1991, the company announced (see newspaper clipping) that the older, green sand portion of the foundry would be closed. During my inspection, it was noted that this part had been shut down. Mr. Castleberry stated that some of the equipment, such as the two furnaces, may be used for the EPS operations, but much of it would be removed. He mentioned that the corporate office (Philip Gray) was "working on" the paperwork to change the foundry's name and designate which permits/equipment would be retained or changed. (Note: Mr. Gray phoned on January 28, and application forms were subsequently sent to him on January 30, 1992.)

In the EPS/"lost foam" area, it was noted that the two induction furnaces and the sand recycling system were in operation. Mr. Castleberry mentioned that the other units/systems, the shotblasts and metal treatment, are used occasionally during the one shift per day operation. No fugitive problems were noted and there were no emissions visible from the sand system baghouse.

BW:cbd

Columbiana ductile plant closing soon

By Kent Faulk
News staff writer

More than 100 workers will lose their jobs as a Columbiana ductile iron casting plant closes at the end of November, a plant spokesman said Wednesday.

Simsco Inc., located off Alabama 70 in Columbiana, tentatively will close on Nov. 30, said Tom Surtees, human resources director for the parent company, Citation Corp. Employees, the state and city officials were notified on Sept. 30 of the closing, he said, compliance with federal law.

Surtees said the closing is being done to merge Simsco into operations of three similar plants Citation has — Southern Ductile Casting Co. in Bessemer and the Simsco plants in Centerville and Selma. "It was to become more efficient (with) the level of sales we have," he said.

The Columbiana plant currently has 165 employees, Surtees said. Of those, 25 will be moved to Southern Ductile and 20 have already been hired by another local company, he said.

Another 10 employees will be moved to Citation Foam Casting, which is located in the same plant in Columbiana as Simsco, Surtees said.

Citation Foam Casting, which currently has about 30 employees, needed more room, Surtees said. "That (Simsco closing) will give them some room for future expansion," he said.

Surtees said corporation officials have been working to find the remainder of the employees jobs and get them the training or education to make the transition to other employment. "We are trying to work with

See Plant, Page 10F

Plant

From Page 9F

our employees any way we can to place them" in new jobs, he said.

Columbiana Mayor Jim Strickland said that when city officials were first informed of the closing they were concerned.

"The initial shock was all gloom and doom," Strickland said. "On further study we are a lot more comforted that they are going to continue to operate Citation Foam Casting with possible expansion in the future," he said.

Citation Corp., a Birmingham-based corporation that manufactures iron and steel castings, has about 1,600 employees and annual sales of \$140 million in its corporate plants and offices, Surtees said.

Simsco, which opened in 1964, was bought by Citation in 1984 from McWane Cast Iron Pipe Co., Surtees said.

CITATION**CITATION CORPORATION**

2 Office Park Circle
Suite 204
Birmingham, AL 35223
(205) 871-5731
FAX (205) 870-8211

March 4, 1992

**Mr. Bill Wood
Alabama Department of Environmental Management
Air Division, Engineering Branch
1751 Congressman W. L. Dickinson Drive
Montgomery, AL 36130**

Dear Mr. Wood,

Enclosed is form ADEM 103 regarding the name change of the Simsco, Inc. foundry in Columbiana. The new name is Citation Foam Casting Company and reflects the shift from green sand molding to evaporative pattern casting. This process is also called lost foam molding.

All current air permits are understood and will be abided by. All technical data reviewed appeared valid with the exceptions listed below.

Permit number 411-0031-Z005 applied to a 40 ton/hour sand system, a shotblast cleaning mill, and a series of grinders. Process changes have resulted in the permanent shutdown of the sand system, and the shotblast cleaning mill is not needed at this time. The baghouse serving the items on permit Z005 also collects emissions from the induction furnaces on permit Z001. The changes mentioned should improve ventilation at the furnaces.

Permit number 411-0031-X007 applied to a Wheelabrator shotblast cleaning mill. This cleaning mill was replaced by the hanger type shotblast cleaning mill covered by permit X010 and is no longer in service. Therefore, permit X007 is not active.

If there are any questions, please call me at 205/871-5731.



Phillip Gray

MAR 1992

SPECIAL PROJECTS
TELEPHONE CONVERSATION RECORD

Date: 10-30-92
Time: 2:41 P.M.
Conversation with: Nelson Lathan (manager of the water works)
Regarding: Columbiana Water Works water system
Facility or Company: WA
Summary: (205) - 669 - 5805

- No surface water intakes are located along the Watahatchee creek.
- No surface water intakes are owned by the columbiana water works.
- The columbiana water works does not purchase water and the water works is a blended system.
- Tot. No. of service connections - 1800
- No wells of the water system have been closed
- They have 4 wells served by the Lime Aquifer
- The state of Ala. did some sampling on the columbiana wells at the first of 1992 and the tests ^{are} clear or clear of any contamination
- The EPA is in the process of doing some Lead Testing on the wells for a nationwide study
- Average Production Rate of the system - 42 million to 52 million

Signature: D.M.File: Simaco

2

SPECIAL PROJECTS
TELEPHONE CONVERSATION RECORD

Date: 10-30-92
Time: 2:41 P.M.
Conversation with: Nelson Lathan (manager of the water works)
Regarding: Columbiana Water Works Water System
Facility or Company: N/A
Summary: (205) 669-5805

- The system serves all of Columbiana with water and sewer.
 - The system serves the following systems:
 - Little Maple Water Authority - 300 Service Connections
 - Spring Creek Water System - 1400 Service Connections
 - Bethel Water System - 900 Service Connections
- ~ These are former home systems.

Signature: _____

File: _____

D. M.

Emasco



Guy Hunt
Governor

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Leigh Pegues, Director

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January 21, 1993

MEMORANDUM

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TO: Jymalyn Redmond, Chief *JR*
Site Assessment Unit
Special Projects

From: Dell Montgomery *D.M.*
Site Assessment Unit
Special Projects

Subject: Site Inspection Trip
SIMSCO Incorporated
Columbiana, Shelby County, Alabama
EPA ID # ALD004025193
Reference # 5818

Citation Foam Casting was visited on January 20, 1993 by Jymalyn Redmond and this writer. The purpose of this trip was to obtain information for a preliminary assessment of the site for the CERCLA program. A site inspection was preformed, photographs were taken, and a windshield survey of the local area was preformed. Mr. Phil Gray, Director of Engineering for Citation Corporation (205-871-5731), guided the site inspection.

To reach the facility follow Interstate 65 north to Shelby County and continue to Highway 25. Turn right onto Highway 25 and follow it northeast approximately 9 miles to County Road 34. At County Road 34 turn left and continue on to a set of rail road tracks. Cross the rail road tracks, take the first road on the left and follow it to the facility located on the right.

According to Mr. Gray, in 1984 Citation Corporation purchased the facility from Simsco Incorporated. In 1992 the main manufacturing processes were changed from green sand molding to lost foam molding. Equipment utilized for green sand molding is presently being removed from the facility. However, portions of the equipment were reviewed during the site reconnaissance.



Citation Corporation is currently active and was operating at the time of the site inspection. According to Mr. Gray 66 people are currently employed at the facility.

The weather was overcast and raining was falling during the entire site inspection.

Structures noted at the facility include:

- A Main Manufacturing Facility
- A Brick Office Building
- Three Warehouses
- Three Baghouses
- Three Cooling Towers (Non - Contact Cooling Water)

Items noted during the site inspection are described below:

The facility grounds consist of approximately 7.4 acres with a slope of approximately 2 to 5 % near the manufacturing building and storage warehouses. The office building is situated on a hill located some distance from the facility.

The facility is secured by a fence containing at least three secured gates. Mr. Gray mentioned that armed guards are maintained at the facility on a 24 hour basis.

The grounds immediately surrounding the main manufacturing facility and warehouses are a mixture of soil and gravel. Areas along the edge of the facility are vegetated with weeds, grass and small wooded patches. The facility office is surrounded by grass. No areas of stressed vegetation were noted at the facility and no odors were detected at the site.

One drainage ditch, three baghouses and an area containing process wastes were noted at the facility.

The drainage ditch begins on the west side of the main manufacturing facility then turns east to pass behind the building and discharge into an unnamed tributary of Town Creek. The ditch is approximately two foot wide and carries storm water and non - contact cooling water. The unnamed tributary appears to be fishable.

The area containing process wastes is located at the rear of the main manufacturing facility to the northeast. The area is directly adjacent to the drainage ditch, is exposed to the elements and is approximately 60 feet from the facility. Storm water runoff was observed flowing directly into the ditch and unnamed tributary from the landfill area. Discolored materials, which appeared to be baghouse catch, were observed entering the stream with storm water runoff from the site. The area is approximately 100 feet long and 100 feet wide and is, according to Mr. Gray,

MEMORANDUM

SIMSCO INCORPORATED

Page 3

approximately 1 to 2 feet deep. Mr. Gray indicated that at least 340 cubic yards of waste material have been removed from the area and disposed of at the Shelby County (or Sheala) landfill. Additional removals are currently on going.

According to Mr. Gray, samples taken from the on site landfill were analyzed and the results were submitted to ADEM with a Sheala landfill permit application.

Two baghouses are located along the rear of the facility to the north. A third baghouse is located on the east side of the facility. Storm water from these baghouses was observed flowing directly into the drainage ditch.

Items noted during the mobile reconnaissance are described below:

The nearest residence (owner unknown), to the site, is located approximately 270 feet northwest of the main manufacturing facility. However, the house is located approximately 250 feet generally north of the waste dump mentioned above. (The location of the house has been pinpointed on attachment 1 of the Simsco Incorporate Preliminary Assessment.) The land within a 1 mile radius of the site is used primarily for small business, light industrial, and residential purposes.

The nearest school, Columbiana Middle School, is located approximately 0.25 miles northwest of the facility. A second school, Columbiana Vocational School, is located approximately 0.71 miles west southwest of the facility. The city of Columbiana contains one elementary school, Elvin Hill Elementary School, located approximately 1.17 miles west southwest of the site.

No private wells were identified within a 4 mile radius of the facility during the well survey.

The facility is presently utilizing public water, sewage and power.

According to local residents, Sawyer Cove, an area located on the Waxahatchee Creek, is utilized as a community fishing area.

SPECIAL PROJECTS
TELEPHONE CONVERSATION RECORD

Date: 1-4-93
Time: 2:38 P.M.
Conversation with: Phillip Gray (Director of Engineering)
Regarding: Waste streams And Disposal
Facility or Company: Citation Corp.
Summary: (205) 669-5750

- Waste streams handled at the site:
 - Baghouse Dust
 - Furnace slag
 - Furnace gas
 - Non contact cooling water
 - Particulate Emissions
 - (Storm water)
- The non contact cooling water is intermittently discharged to dry ditch which carries storm water
- NO Analytical test results are available on the cooling water.
- Citation corp. has submitted an application for a general storm water runoff permit to ADEM (Jimmy Lee) and they are attempting to get the non contact cooling water discharge covered under this permit. Permit # ALG 1002000

Signature: D. M.File: Sims Co

**SPECIAL PROJECTS
TELEPHONE CONVERSATION RECORD**

Date: 1-4-93
 Time: 2:38 P.M.
 Conversation with: Phillip Gray (Director of Engineering, Citation Corp.)
 Regarding: Waste streams And Disposal
 Facility or Company: Citation Corp.
 Summary: (205) 669-5750

- The Furnace slag, sand, And Baghouse dust are sent all together to the Shelby landfill (i.e. Shelby Co. landfill)
- The disposal is CURRENTLY permitted through the ADEM Land Division
- The Approval for disposal of baghouse dust & foundry sand was given April 21, 1992 by ADEM Special Waste Unit, Solid Waste Branch Sandra Bonner.
- In the past disposal of sand, Baghouse dust, and foundry slag was done on site.
- An Analytical testing was done on baghouse dust & sand - TCLP tests were run - (Mr. Gray will fax test results to ADEM Special Projects)
- Furnace slag is sent to Shelby landfill
- Mr. Gray indicated slag is covered under Permit.

Signature: _____

D. M.

File: _____

Simaco

SPECIAL PROJECTS
TELEPHONE CONVERSATION RECORD

Date: 1-4-93
 Time: 2:38 P.M.
 Conversation with: Phillip Gray [Director of Engineering] Citation Corp.
 Regarding: Waste Streams And Disposal
 Facility or Company: Citation Corp.
 Summary: (205) 669-5750

- Approximately 25 cubic yards Per month of foundry sand, baghouse dust, and slag has been disposed of at Shelby landfill following Permission given on April 21, 1992
- The on site dumping was stopped in February of 1992.
- Some material has been removed from the site to prevent ponding of water and runoff.
- The Analytical results submitted with permit applications were produced in August 1991
- Some solvents are kept on site in tanks
- The solvents are not disposed of.
- The solvents are used to Paint Castings.
- Types of materials handled at Simco: molding sand, Castings, Expanded Polystyrene (EPS), Steel Scrap, Iron Returns, Graphite, magnesium (Used in ductile treatment),

Signature:

D. M.(For Mold Shop factory Coating
non Hazardous
inorganic
materials)

File:

Simco

1-8-93

9:15 A.M. to 10:01 A.M.

Interview with David Lovoy
ADEM Hydrogeologist

The area around the Simaco facility
does not contain karst terrain.
(May refer to Mr. Lovoy's Geology
report of July 13, 1992)

There is a slim possibility of landfilled
materials at the site reaching to the
Cartersville Fault.

A private or public well may have
caused the sinkhole along the
Cartersville Fault.

The Shady Knox Aquifer has a
Limestone formation which provides
water to the Columbiana public
Wells.

The formations present on each side
of the fault are very poor aquifers.

Private Wells in the area are fed
by a residual Aquifer (Surface Aquifer).
This residual aquifer is 20 Feet or less
thick.

1-8-93 (Interview with David Lovoy)

The local residual Aquifer flows approximately South Southeast (at the site)

The Shady Knox Aquifer flows, regionally South Southwest.

At the site there is only a residual (surface) aquifer. No real flow surface Aquifer exists at the site so there is no flow.

GEOLOGICAL SURVEY

Thomas J. Joiner
Acting State Geologist

WATER RESOURCES DIVISION

Russell L. Lipp
Chief Geologist

CIRCULAR 101

SINKHOLE OCCURRENCE IN WESTERN SOUTHERN ALABAMA

By William M. Warren

UNIVERSITY, ALABAMA
1978

surround dewatered mines. The area affected may not be as large, but extensive damage may occur in the immediate area. High pumpage rates are not necessary to cause sinkholes, and some have occurred adjacent to domestic wells.

Columbiana is not in the Cahaba Valley district, but subsidence problems there are noteworthy because the same problems have, or will, occur in the study area. Extensive subsidence occurred during late August 1968 (Powell and LaMoreaux, 1969). Figure 24 shows the area affected by the extended pumpage of two city wells tapping the Newala Limestone(?) aquifer. Alluvial deposits and the Floyd Shale

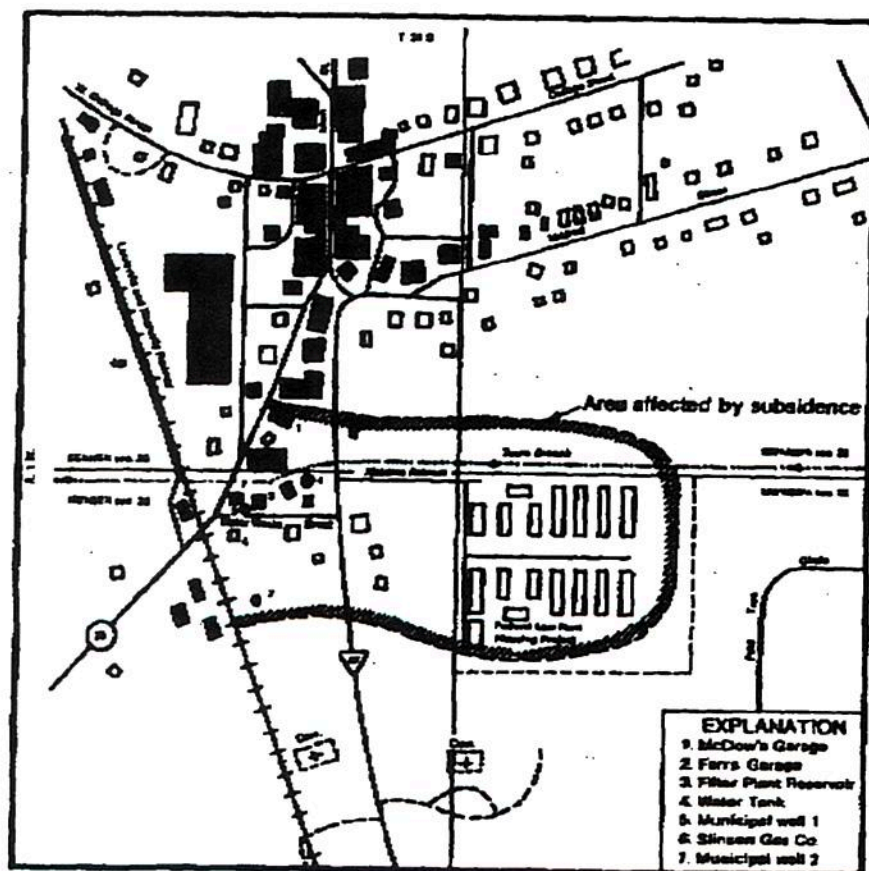


Figure 24.—Area affected by subsidence in Columbiana, Alabama (from Powell and LaMoreaux, 1969).

overlie the limestone at Columbiana. The bedrock which was the approximate pump number 2. Continuous pumpage of the resulted in the removal of sediment by tur Subsidence caused structural damage to storage reservoir (fig. 25) began to lea

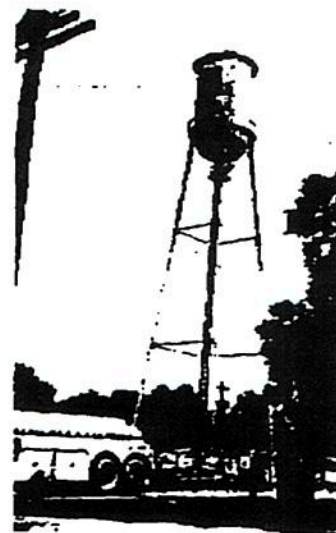


Figure 25.—Elevated water-storage tank at Columbiana, Alabama (from Powell and LaMoreaux, 1969). The city abandoned the city wells and now obtain water from Kewahatchie Spring. The area is now under natural conditions and is again extensively wooded.

In 1951, the city of Calera experienced a newly completed public-supply well within the Newala Limestone aquifer was tapped sinkholes formed after pumping 100 gpm. Tracing dye injected into one sinkhole discharge 1.5 hours later. The pumpage (3.8 l/sec) and no sinkholes occurred; the well was abandoned.

During a test-drilling project in 1974, problems in the search for two new water wells were drilled in a limestone valley east of

ATTACHMENTS

- Attachment 1 U.S.G.S. 7.5 Minute Series Topographic Maps:
Columbiana, Alabama, 1980;
Bounds Lake, Alabama, 1980;
Ozan, Alabama, 1979;
Shelby, Alabama, 1980.
- Attachment 2 Latitude and Longitude Calculations Worksheet of
Simsco, Incorporated.
- Attachment 3 General Highway Map:Shelby County, Alabama, 1983.
- Attachment 4 Site Sketch.
- Attachment 5 Richard Grusnick, Chief, ADEM Air Division,
Memorandum of April 26, 1988 to Jerry Carter at
Simsco Foundry, Columbiana, Alabama; Notice of
Violation.
- Attachment 6 Jack E. Ravan, Regional Administrator, U.S. EPA,
Region IV, Letter dated December 2, 1985 to
Charles Armor, General Manager, Simsco, Inc.,
Columbiana, Alabama, Subject; Information
Request.
- Attachment 7 Solid Waste Determination Form For Citation Foam
Castings Company located in Columbiana, Alabama,
Analytical Test Results for Solid Waste, and
Permit Approval Letter.
- Attachment 8 General Storm Water Permit Notice of Intent.
- Attachment 9 Photo documentation Log.

OVERSIZED
DOCUMENT

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2
LI USING ENGINEER'S SCALE (1/60)

SITE NAME: Sinaco, Inc. CERCLIS #: AL0004025193

AKA: Sinaco SSID: _____

ADDRESS: 130 Industrial Park Road

CITY: Columbiana STATE: Ala. ZIP CODE: 35051

SITE REFERENCE POINT: _____

USGS QUAD MAP NAME: Columbiana, Ala. TOWNSHIP: 21 N/S RANGE: 1 E/W

SCALE: 1:24,000 MAP DATE: 1980 SECTION: 23 26 1/4 SW 1/4 NW 1/4

MAP DATUM: (1927) 1983 (CIRCLE ONE) MERIDIAN: _____

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy):

LONGITUDE: 86° 30' 00" LATITUDE: 33° 07' 30"

COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:

LONGITUDE: 86° 35' 00" LATITUDE: 33° 10' 00"

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 168

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

$$A \times 0.3304 = \underline{55.51"}$$

C) EXPRESS IN MINUTES AND SECONDS (1' = 60"): 00' 55.51"

D) ADD TO STARTING LATITUDE: 33° 10' 00.00" + 00' 55.51" =

SITE LATITUDE: 33° 10' 52.00"

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 244

B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:

$$A \times \frac{0.3927}{0.3304} = \underline{95.82"}$$

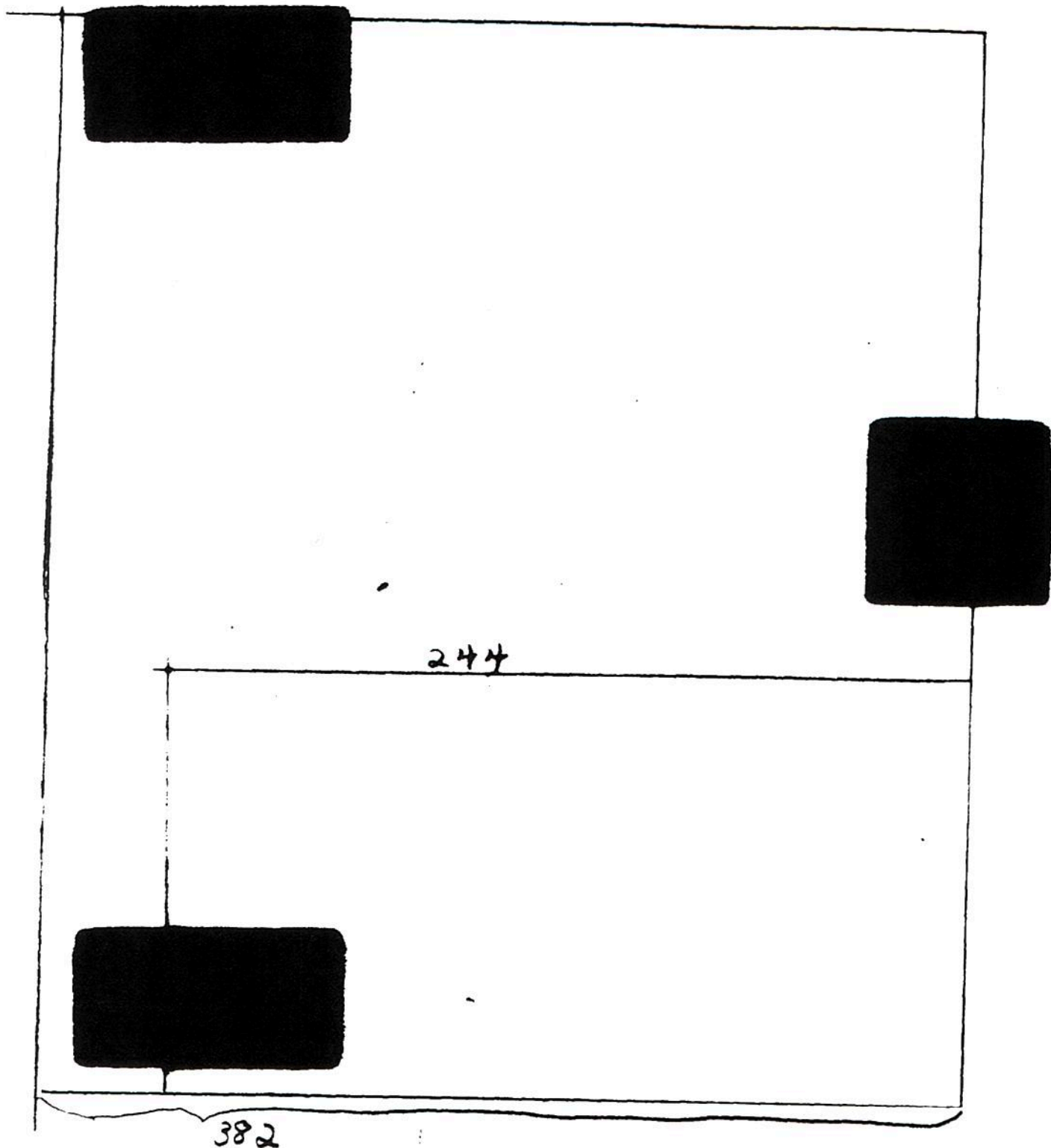
C) EXPRESS IN MINUTES AND SECONDS (1' = 60"): 1' 35.82"

D) ADD TO STARTING LONGITUDE: 86° 35' 00.00" + 1' 35.82" =

SITE LONGITUDE: 86° 36' 36.00"

INVESTIGATOR: A.M.

DATE: 10-19-92



SITE NAME: Sims Co, Inc. NUMBER: AL0004025193

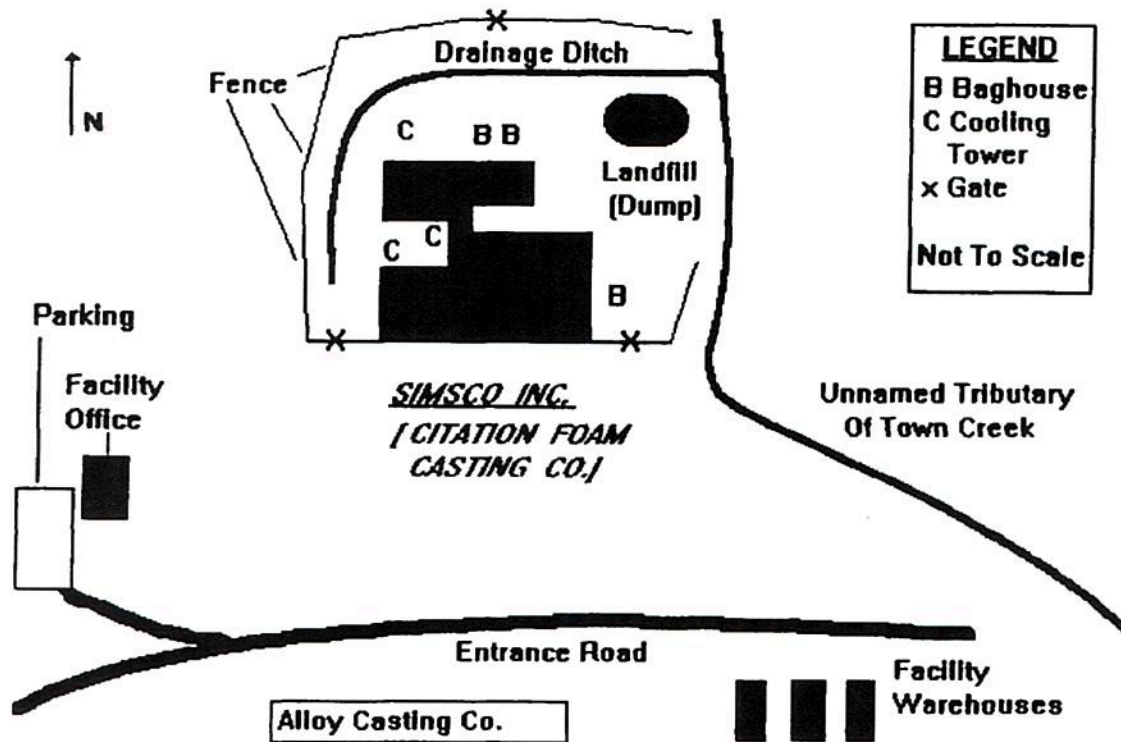
MAP NAME: Columbiana, Ala. SCALE: 1:24000 DATUM: 1927

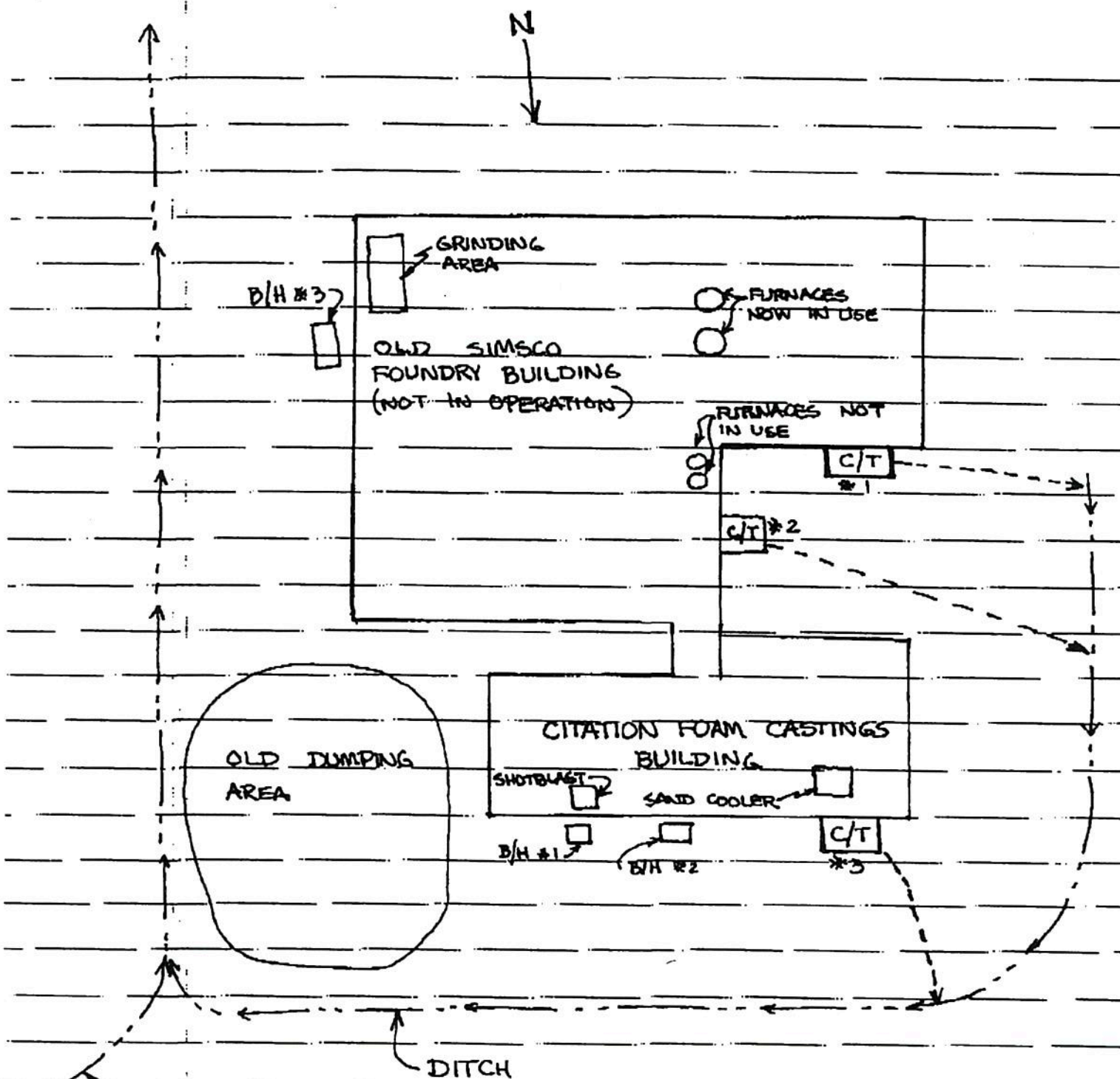
COORDINATES OF LOWER RIGHT HAND CORNER OF 2.5 MINUTE GRID

LATITUDE 32° 10' 00" LONGITUDE 86° 35' 00"

DOCUMENT

OVERSIZED





B/H #3 is baghouse for grinding room

C/T #1 is cooling tower for furnaces in use

C/T #2 is cooling tower for furnaces not presently in use

C/T #3 is cooling tower for sand cooler

B/H #1 is baghouse for shotblast machine

B/H #2 is baghouse for sand system

ADEM

**ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

Leigh Pegues, Director

July 13, 1992

Guy Hunt
Governor

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36130
(205) 271-7700
FAX 271-7950
270-5612

MEMORANDUM

TO: Dan Cooper, Chief
Special Projects Division

FROM: David M. Lovoy, Hydrogeologist *DL*
Groundwater Branch
Water Division

RE: Preliminary Assessment, Simsco Incorporated
Shelby County, Alabama
ALD 004 025 193

Field Offices:

110 Vulcan Road
Birmingham, AL
35209
(205) 942-6168
FAX 941-1603

P.O. Box 953
Decatur, AL
35602
(205) 353-1713
FAX 340-9359

2204 Perimeter Road
Mobile, AL
36615
(205) 450-3400
FAX 479-2593

The following CERCLA Preliminary Assessment was prepared by the Hydrogeology Unit of the Groundwater Branch at the request of Jymalyn Redmond of the ADEM Special Projects Branch. Research was conducted through a search of the literature and information available in the Groundwater Branch and no site inspection was conducted.

LOCATION

The Simsco Incorporated facility (Simsco) is located within the city limits of Columbiana, Alabama, at 130 Industrial Park Road. The U.S. Geological Survey's 7.5 minute quadrangle map of Columbiana, Alabama gives the location of the facility in the Northwest 1/4 of Section 26, and the Southwest 1/4 of Section 23, Township 21 South, Range 1 West (Figure 1).

SURFACE WATER AND TOPOGRAPHY

Columbiana is located in the Coosa Valley physiographic district of the Alabama Valley and Ridge physiographic section. The area surrounding the Simsco site consists of rolling hills with relief being generally less than 100 feet within one (1) mile of the facility. The Simsco site is located at an elevation of approximately 520 feet above mean sea level. Surface drainage at the site is to an unnamed tributary of Waxahatchee Creek which is a tributary of the Coosa River.

SOILS

Soils at the site are of the Townley-Sunlight complex. This complex consists of moderately deep and shallow, undulating to steep, well drained soils that have a clayey or loamy subsoil, formed in residuum of shale and siltstone (Stevens, 1984).

Townley soils typically have 5 inches of yellowish brown silt loam at the surface. The subsoil is strong brown silt loam that extends to a depth of 10 inches. Mottled yellowish red clay extends to 30 inches with the underlying 10+ inches being mottled, brownish yellow silty clay over tilted, weathered shale and siltstone. Townley soils are strongly acid or very strongly acid (pH 5.5 to 4.5) and low in natural fertility. The slope in which these soils are usually found and thus the slope of the site is 12 to 35% (Stevens, 1984).

Sunlight soils typically have a surface layer that is a dark grayish brown channery silt loam that is about 2 inches thick. The subsoil is yellowish brown channery silt loam that extends to a depth of about 5 inches and a lower part which is extremely channery silty clay loam that extends to a depth of 12 inches. The parent material is shaly siltstone. Sunlight soils are strongly acid or very strongly acid (pH 5.5 to 4.5), low in natural fertility, and low in organic matter content. Permeability of these soils is moderate, water capacity low, and erosion is a hazard (Stevens, 1984).

Urban land is also present at the site. This land includes areas which have been altered by man and include: buildings, garages, sidewalks, streets, parking lots, and areas that have been disturbed by cutting, filling and grading.

The depth to bedrock with these soils is generally less than 5 feet and depth to seasonal high groundwater is greater than 6 feet (Stevens, 1984).

GEOLOGY

The Simsco site is underlain by the Floyd Shale of Mississippian age. The Floyd Shale unconformably overlies the Fort Payne Chert in Shelby County and consists of gray to olive-green, thinly fissile to crumbly clay shale with interbedded, massive to lens-shaped, fine-grained, green to gray sandstone. The Floyd Shale is typically found in valleys adjacent to ridges comprised of the more resistant Fort Payne Chert and Parkwood Formation (Tew, 1986). The thickness of the Floyd Shale is up to 2,000 feet in Alabama, but is expected to be less than 300 feet in the vicinity of Simsco.

The structural geology of Shelby County is complex due to intense structural deformation during the Appalachian orogeny. Numerous folds and thrust faults are present throughout the county. These folds and faults generally trend northeast to southwest (Figure 2).

HYDROGEOLOGY

According to the Area 4 Report, the Simsco site is not located in an area of recharge and susceptibility to surface contamination for the Knox-Shady aquifers, the major aquifer in southeast Shelby County. However, the Talladega-Cartersville Fault is less than 1 mile south and southeast of the site. This fault exposes the Cambrian age Kehatchee Mountain Group undifferentiated adjacent to the Mississippian age Floyd Shale and may influence the hydrogeology of the surrounding area (Tew, 1986).

One sinkhole is noted as being located within the city limits of Columbiana and approximately one (1) mile southeast of the Simsco site. This sinkhole is noted in the U.S. Geological Survey and Alabama Highway Department map entitled "Areas In Which Sinkholes Have Occurred Or Can Occur In Shelby County, Alabama", 1977, as having had or is continuing to have subsidence since 1940 (Figure 3). Aside from this one sinkhole, the area surrounding Columbiana is not located in an area which is highly susceptible to sinkhole development.

The city of Columbiana, according to the Area 4 Report, operates four public water supply wells (Planert and Pritchett, 1989). These wells are located greater than one (4) miles from the Simsco site.

GROUNDWATER USAGE AND QUALITY

According to the Area 4 Report, the nearest public water supply well is located over six (6) miles from the Simsco facility.

CLIMATE

The climate in Shelby County is humid subtropical, with hot humid summers and cool, short winters (Stevens, 1984). The average annual precipitation is 55.53 inches, and the average annual temperature is 62.2 degrees Fahrenheit.

SELECTED REFERENCES

Planert, Michael, and Pritchett, James L., 1989, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 4: U.S. Geological Survey, Water Resources Investigation, Report 88-4133.

Tew, Berry H., 1986, Map 171: Mineral Resources Map of Shelby County: Geological Survey of Alabama.

Stevens, Robert W., 1984, Soil Survey of Shelby County, Alabama, United States Department of Agriculture.

Areas in Which Sinkholes Have Occurred or Can Occur in Shelby County, Alabama, 1977: U.S. Geological Survey in cooperation with the Alabama Highway Department.

COLUMBIANA QUADRANGLE
ALABAMA
7.5 MINUTE SERIES (TOPOGRAPHIC)

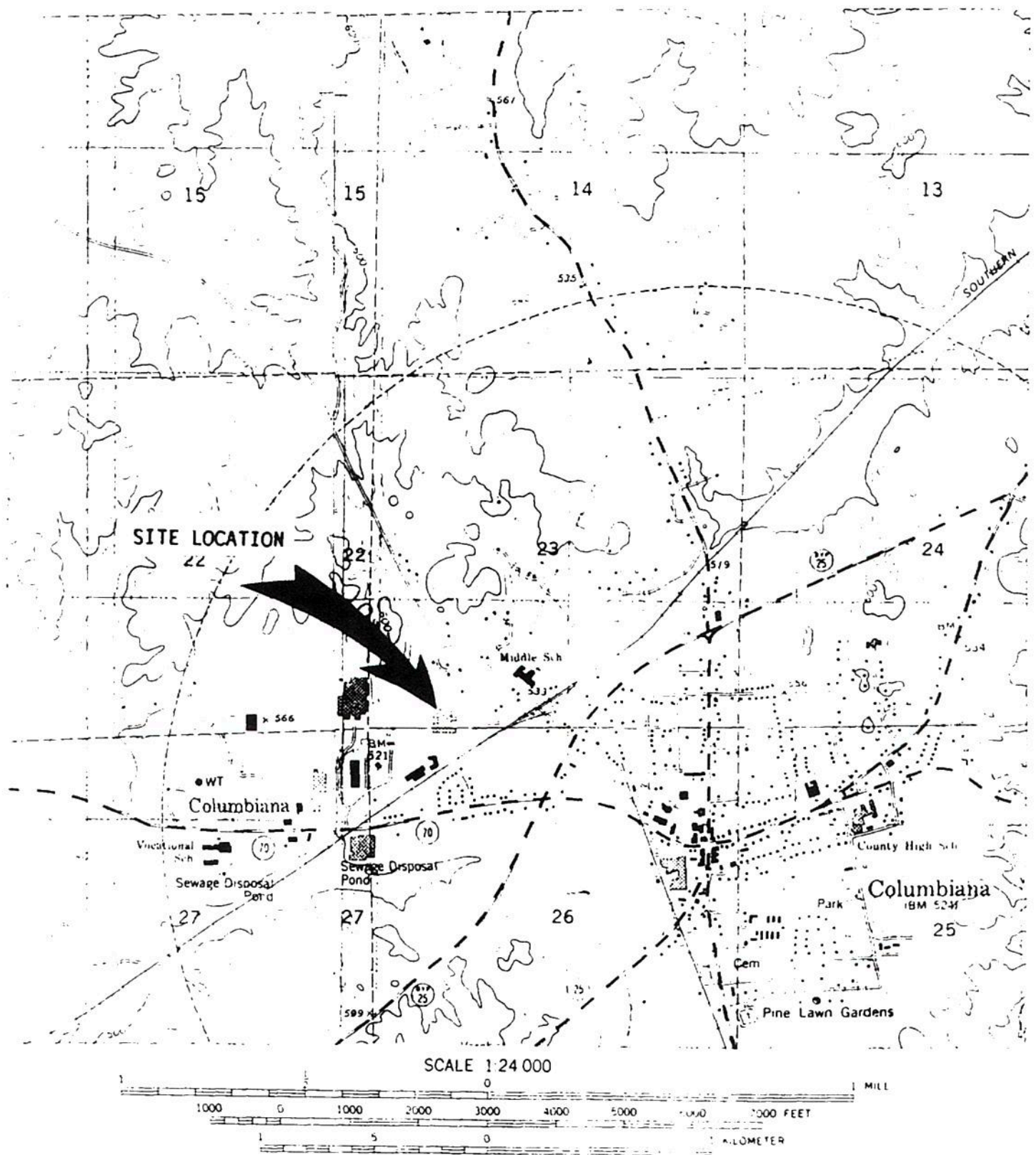


FIGURE 1

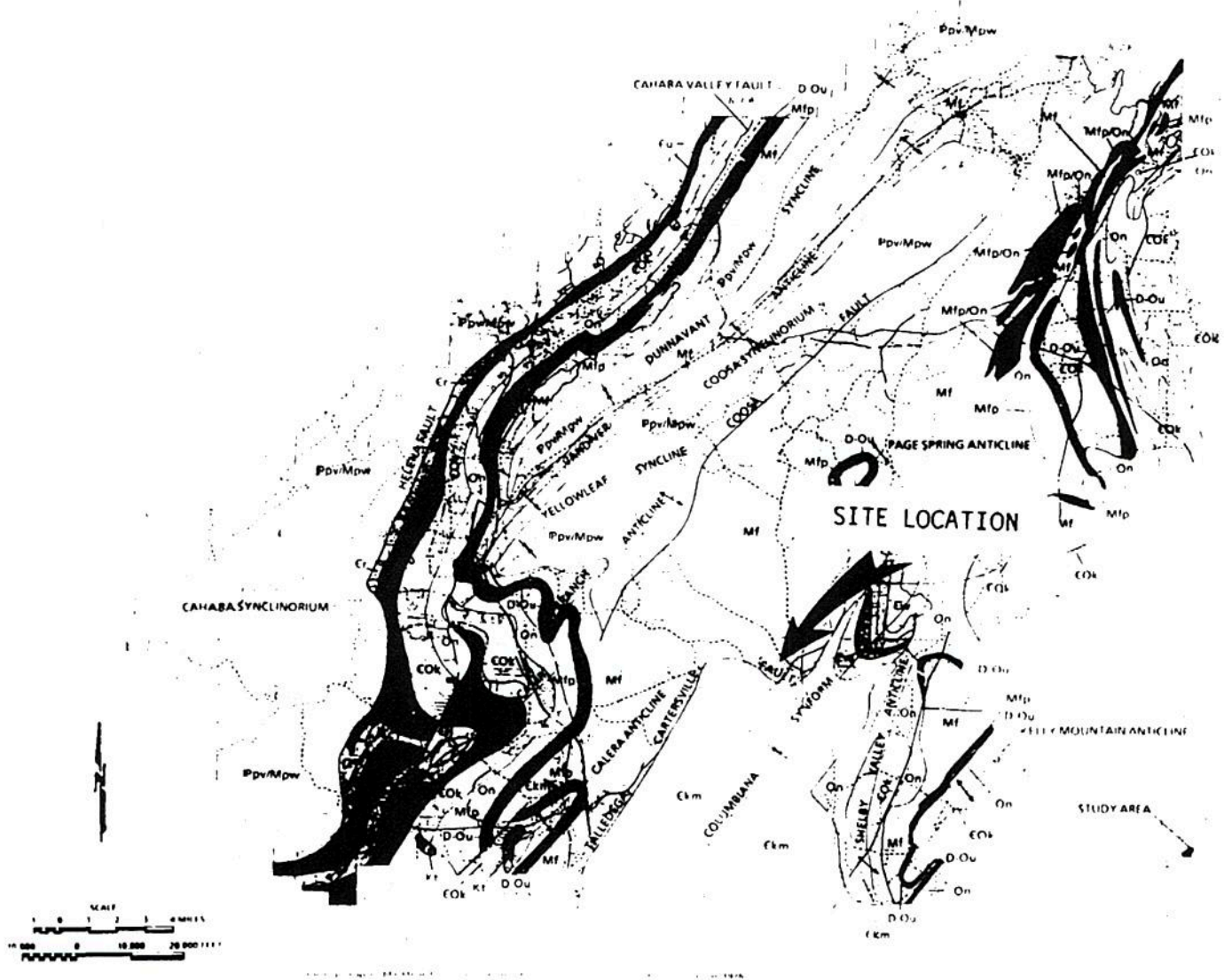


FIGURE 2 Generalized geologic map of Shelby County, Alabama

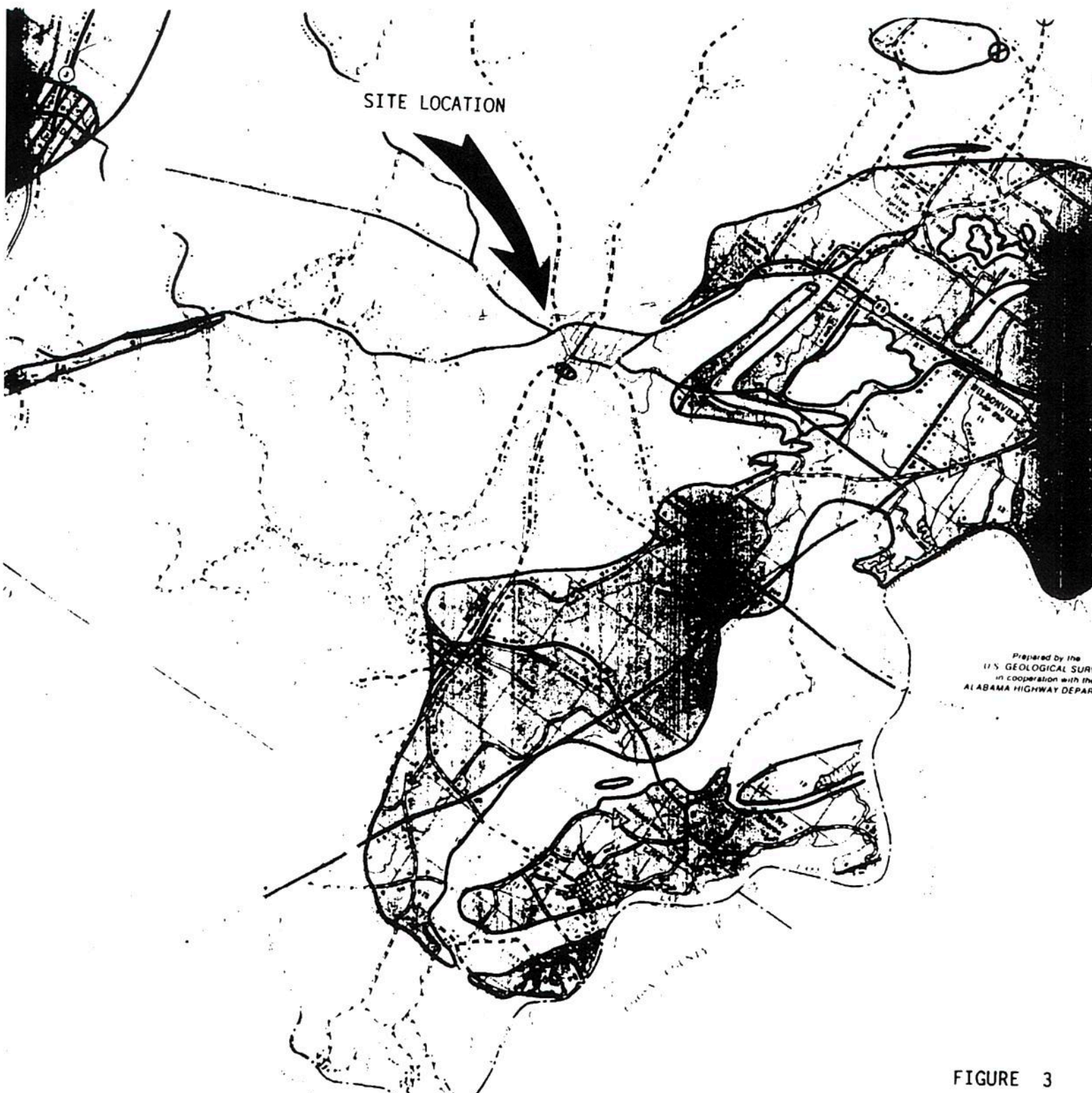


FIGURE 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

DEC - 2 1985

4WD-RM

*Mml*DEC 1985
RECEIVED
ADEM
Land Division

Mr. H. Charles Armor, General Manager
Simsco, Inc.
130 Industrial Park Road
Columbiana, Alabama 35051

Dear Mr. Armor:

Your facility has been identified by the Environmental Protection Agency (EPA) as an iron or steel manufacturer as defined by Standard Industrial Codes (SIC) 3321 through 3325. Such facilities generate hazardous wastes, generally in the form of an air emission control dust or sludge. These wastes are often contaminated with significant amounts of cadmium, lead and hexavalent chromium. Consequently, we believe that your facility generates, stores, treats, transports, disposes of, or otherwise handles or has handled a hazardous waste.

For the purposes of enforcing the provisions of the Resource Conservation and Recovery Act (RCRA) as amended, you are hereby required, pursuant to Section 3007, Subtitle C of RCRA, 42 U.S.C. §6927, to submit the following information to EPA within thirty (30) days of receipt of this letter:

- ° A short description of your facility including products, capacity, raw materials used, type of furnace (electric, coke fired, etc.), as well as a short operating history.
- ° A description of your air pollution control system to include type (baghouse, scrubber, etc.) and date of installation.
- ° A description and characterization of your air emission control dusts and sludges including amounts produced, your determination of whether or not these wastes are hazardous as defined in 40 CFR 261.24 and 261.32, and any analytical data on these materials. A separate description, characterization and determination should be provided for your other solid wastes, such as slags and foundry sands.
- ° A detailed description of your waste management practices concerning these dusts, sludges and other solid wastes, from the date these wastes were first generated, to the present. This description must include any on-site or off-site disposal sites such as surface impoundments, waste piles, or landfills.

1-16-86 10:15 AM 1/11/86

- ° Copies of any documents or correspondence that support the descriptions and determinations required by the above paragraphs.
- ° Copies of all correspondence between your facility and the Land Division of the Alabama Department of Environmental Management (ADEM), and your local solid waste authority for the last twelve month period. Do not include correspondence relative to your State air pollution or water pollution control authority.

You may, if you desire, assert a business confidentiality claim covering part or all of the information requested, in the manner described by 40 CFR § 2.203(b). Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice to you. EPA will construe the failure to furnish a confidentiality claim with your response to this letter as a waiver of that claim. You should read the above cited regulations carefully before asserting a business confidentiality claim, since certain categories of information are not properly the subject of such a claim.

Failure to respond to each and every request herein within thirty (30) days of receipt of this letter may result in enforcement action by EPA pursuant to § 3008 of RCRA under which, EPA may seek the imposition of penalties of up to \$25,000 for each day of continued non-compliance.

All information should be submitted to Mr. J. William Steiner, Waste Compliance Section, at the above address. If you have any questions on the technical aspects of this matter, please contact Mr. Steiner at (404) 881-3016. Your legal questions should be addressed to Ms. Elizabeth L. Osheim, Assistant Regional Counsel at (404) 881-2641.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Jack E. Ravan", followed by the typed text "Deputy for".

Jack E. Ravan
Regional Administrator

cc: Daniel E. Cooper, Director
Land Division, ADEM

ADEM**ALABAMA
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

Leigh Pegues, Director

Guy Hunt
Governor

1751 Cong. W. L.
Dickinson Drive
Montgomery, AL
36130
(205) 271-7700
FAX 271-7980
270-5612

April 21, 1992

Field Offices:

110 Vulcan Road
Birmingham, AL
35209
(205) 942-6168
FAX 941-1603

P.O. Box 983
Decatur, AL
35602
(205) 353-1713
FAX 340-8359

2204 Perimeter Road
Mobile, AL
36615
(205) 479-2336
FAX 479-2593

Mr. Phillip Gray
Citation Foam Casting Company
2 Office Park Circle Suite 204
Birmingham, AL 35223

Dear Mr. Gray:

Personnel with ADEM have reviewed your request to dispose of approximately 25 cubic yards monthly of spent foundry sand and baghouse dust. According to the information submitted dated March 5, 1992, this waste appears to be non-hazardous in accordance with the applicable regulations.

We are approving the Highway 70 Sanitary Landfill, permit number 59-04R to accept this material for disposal. Contact Mr. Robert Shaw at (205) 669-3880 for local approval and any additional requirements prior to delivery.

One year from the date of this letter, another written certification as to the non-hazardous status of this waste must be received by this office with any supporting documentation included.

NOTE: This letter does not exempt you from complying with applicable requirements of ADEM Administrative Code Division 335-14, Hazardous Waste Program Rules.

If you have any questions regarding this, please contact me at (205) 270-5643.

Sincerely,

Sandra R. Bonner
Special Waste Unit
Solid Waste Branch

SRB/kap#1909

C: Robert Shaw w/enclosures

File: I/W - Citation Foam Casting Company
CF: 59-04

CITATION**CITATION CORPORATION**

2 Office Park Circle
Suite 204
Birmingham, AL 35223
(205) 871-5731
FAX (205) 870-8211

March 6, 1992

Mr. Russel Kelly
Alabama Department of Environmental Management
Solid Waste Division
1751 Congressman W. L. Dickinson Drive
Montgomery, Alabama 36130

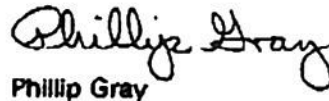
Dear Mr. Kelly,

Enclosed is a solid waste determination form for Citation Foam Castings Company located in Columbiana, Alabama. This facility is a ductile iron foundry using the evaporative pattern casting process also known as lost foam molding.

As stated on the form attached, the process is currently generating approximately 25 cubic yards of spent sand and baghouse dust monthly. With this type of casting process the sand requires no binders or other additives as in green sand molding. The baghouse dust is from sand cooling, casting cleaning and grinding, and melting operations.

If there are any questions or additional information is needed, please call me.

Sincerely,



Phillip Gray

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
SOLID/HAZARDOUS WASTE DETERMINATION FORM***

1. General Information

- A. Facility Name CITATION FOAM CASTING COMPANY
Address 130 INDUSTRIAL PARK ROAD
COLUMBIANA, AL 35051
Phone Number 205 / 669-5750
- B. Contact Person & Title CHARLES ARMOR
VICE PRESIDENT & GENERAL MANAGER
- C. County & State in which waste was generated. SHELBY COUNTY, ALABAMA
- D. Person or Agency making request for disposal. If different from A, please list name, address, and phone number.
REQUEST SUBMITTED BY: PHILLIP GRAY
CITATION CORPORATION
2 OFFICE PARK CIRCLE
SUITE 204
BIRMINGHAM, AL 35223
(205) 871-5731

This form is not to be used for disposal pre-approval of Solid Waste at a Commercial Hazardous Waste Disposal Facility in the State of Alabama.

2. **Solid Waste**

☒ Yes, continue to question 3.

☐ No, explain in full detail below, then go to 6.

3. **Excluded From Regulation**

☐ Yes, explain in full detail below, then go to 6.

☒ No, continue to question 4.

4. Listed Hazardous Waste

_____ Yes, identify the EPA waste code in the space provided below, then go to 6.

 X No, continue to question 5.

5. Characteristic Hazardous Waste

_____ Yes, identify the waste code in the space provided below and continue to 6.

 X No, continue to 6.

6. Petroleum Waste

Does the waste contain any petroleum material?

_____ Yes, include a copy of the Total Petroleum Hydrocarbons (TPH) of the waste for every 20 cubic yards and the methods utilized.

X No, continue to question 7.

A. Does the waste contain or has it been contaminated with any leaded material?

_____ Yes, include a copy of a Toxicity Characteristic Leaching Procedure (TCLP) analysis for heavy metals.

X No, continue to question 7.

7. Waste Description

WASTE IS COMPRISED OF SPENT FOUNDRY SAND AND BAGHOUSE DUST. THE WASTE STREAM IS ALL SOLID WASTE AND HAS BEEN TESTED AS NONHAZARDOUS. TCLP TESTS ARE ATTACHED.

THE WASTE MATERIAL IS GENERATED AT AN ESTIMATED 25 CUBIC YARDS PER MONTH.

A POTENTIAL RECYCLING OPTION IS USING THE SAND IN CONCRETE, SINCE THIS PROCESS REQUIRES NO ADDITIVES IN THE MOLDING SAND. THE SAND IS SIMPLY VIBRATED TO COMPACT IT AROUND A FOAM PATTERN.

**** If additional space is needed, attach a separate sheet.**

8. **Intended Method of Disposal - List Facility name and Permit Number if intended for disposal at a Solid Waste Disposal Facility.**

DISPOSAL AT SHEALA LANDELL

PERMIT NUMBER 59-06

EXPLORING OTHER OPTIONS.

Upon completion, continue to 9.

9. **Certification**

I certify under penalty of law that this waste material is not an infectious or hazardous waste and that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phillip Gray

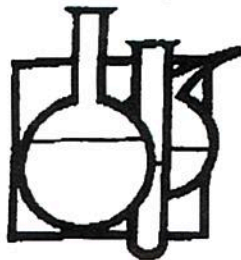
Signature

DIRECTOR OF ENGINEERING

Title

MARCH 3, 1992

Date



GUARDIAN SYSTEMS, INC.

305 Ashville Road
P.O. Box 190
Leeds, Alabama 35094
205/699-6647

August 8, 1991

Citation Corporation
#2 Office Park Circle
Birmingham, AL 35223-

Control No: 26807

Sample Date: 07/30/91

Time: 0800

Sampler: TF

Attention: Mr. Tim Floyd

Sample Mark: Flask (*Spent Sand*)

Sample Number: TCLP

LABORATORY REPORT

PARAMETER	UNITS	RESULTS	ANAL DATE	TIME	METHOD	
Silver (Ag)						
Arsenic (As)	mg/L	<0.02	JTB	07/31	1630	7760(3)
Barium (Ba)	mg/L	<0.005	JTB	07/31	1800	7060(3)
Cadmium (Cd)	mg/L	<10.0	JTB	07/31	1700	7080(3)
Chromium (Cr)	mg/L	<0.02	JTB	07/31	1730	7130(3)
Chromium, Hexavalent (Cr6)	mg/L	<0.02	JTB	07/31	1600	7190(3)
Mercury (Hg)	mg/L	<0.02	JTB	07/31	1400	7196(3)
Lead (Pb)	mg/L	<0.001	LWH	08/02	0830	7470(3)
Selenium (Se)	mg/L	<0.02	JTB	07/31	2200	7421(3)
	mg/L	<0.005	JTB	07/31	1900	7740(3)

- METHOD REFERENCES -

- (3) Test Methods for Evaluating Solid Wastes Physical/Chemical Method SW-846, 3rd Edition, EPA 1986

Charles M. Osh...

GUARDIAN SYSTEMS, INC.
P.O. BOX 190
LEEDS, ALABAMA 35094

August 13, 1991

Citation Corporation
2 Office Park Cir.
Birmingham, AL 35223

Sample Mark: Flask
Sampled On: 07/30/91 at 0800
Sampler: TF
Control No: 26857

Attention: Mr. Tim Floyd

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD 8240
ANALYST Greg Lantrip, 08/06/91 AT 1513
UNITS mg/L

PARAMETER	RESULTS	DETECTION LIMIT
Benzene	<0.05	0.05
Carbon tetrachloride	<0.05	0.05
Chlorobenzene	<0.05	0.05
Chloroform	<0.05	0.05
1,4-Dichlorobenzene	<0.05	0.05
1,2-Dichloroethane	<0.05	0.05
1,1-Dichloroethylene	<0.05	0.05
Methyl ethyl ketone	<5.00	5.00
Tetrachloroethylene	<0.05	0.05
Trichloroethylene	<0.05	0.05
Vinyl chloride	<0.05	0.05

Approved By: Charles M. Johnson

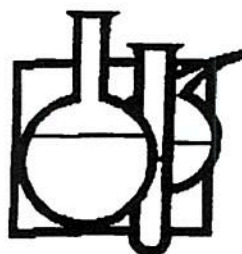
Citation Corporation
Control # 26857, page two

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD 8270

ANALYST Greg Lantrip, 08/09/91 AT 1416
UNITS ug/L

PARAMETER	RESULTS	DETECTION LIMIT
o-Cresol	<0.05	0.05
m,p-Cresol	<0.10	0.10
Cresol	<0.05	0.05
2,4-Dinitrotoluene	<0.05	0.05
Hexachlorobenzene	<0.05	0.05
Hexachloro-1,3-butadiene	<0.05	0.05
Hexachloroethane	<0.05	0.05
Nitrobenzene	<0.05	0.05
Pentachlorophenol	<0.05	0.05
Pyridine	<0.05	0.05
2,4,5-Trichlorophenol	<0.05	0.05
2,4,6-Trichlorophenol	<0.05	0.05

Approved by: Charles M. Lantrip



GUARDIAN SYSTEMS, INC.

305 Ashville Road
P.O. Box 190
Leeds, Alabama 35094
205/699-8647

August 8, 1991

Citation Corporation
#2 Office Park Circle
Birmingham, AL 35223-

Control No: 26256

Sample Date: 07/30/91

Time: 0800

Sampler: TF

Attention: Mr. Tim Floyd

Sample Mark: Dust Coll

Sample Number: TCLP

LABORATORY REPORT

PARAMETER	UNITS	RESULTS	ANAL	DATE	TIME	METHOD
Silver (Ag)	mg/L	<0.02	JTB	07/31	1630	7760(3)
Arsenic (As)	mg/L	<0.005	JTB	07/31	1800	7060(3)
Barium (Ba)	mg/L	<10.0	JTB	07/31	1700	7080(3)
Cadmium (Cd)	mg/L	<0.02	JTB	07/31	1730	7130(3)
Chromium (Cr)	mg/L	<0.02	JTB	07/31	1600	7190(3)
Chromium, Hexavalent (Cr6)	mg/L	<0.02	JTB	07/31	1400	7196(3)
Mercury (Hg)	mg/L	<0.001	LWH	08/02	0830	7470(3)
Lead (Pb)	mg/L	<0.02	JTB	07/31	2200	7421(3)
Selenium (Se)	mg/L	<0.005	JTB	07/31	1900	7740(3)

- METHOD REFERENCES -

(3) Test Methods for Evaluating Solid Wastes Physical, Chemical, Method SW-846, 3rd Edition, EPA, 1986

GUARDIAN SYSTEMS, INC.
P.O. BOX 190
LEEDS, ALABAMA 35094

August 13, 1991

Citation Corporation
2 Office Park Cir.
Birmingham, AL 35223

Attention: Mr. Tim Floyd

Sample Mark: Dust Coll
Sampled On: 07/30/91 at 0800
Sampler: TF
Control No: 26856

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD 8240
ANALYST Greg Lantrip, 08/06/91 AT 1301
UNITS mg/L

PARAMETER	RESULTS	DETECTION LIMIT
Benzene	<0.05	0.05
Carbon tetrachloride	<0.05	0.05
Chlorobenzene	<0.05	0.05
Chloroform	<0.05	0.05
1,4-Dichlorobenzene	<0.05	0.05
1,2-Dichloroethane	<0.05	0.05
1,1-Dichloroethylene	<0.05	0.05
Methyl ethyl ketone	<5.00	5.00
Tetrachloroethylene	<0.05	0.05
Trichloroethylene	<0.05	0.05
Vinyl chloride	<0.05	0.05

Approved By: _____

Charles M. Johnson

GUARDIAN SYSTEMS, INC.
P.O. BOX 190
LEEDS, ALABAMA 35094

August 13, 1991

Citation Corporation
2 Office Park Cir.
Birmingham, AL 35223

Attention: Mr. Tim Floyd

Sample Mark: Dust Coll
Sampled On: 07/30/91 at 0800
Sampler: TF
Control No: 26856

TOXICITY CHARACTERISTIC LEACHING PROCEDURE
METHOD 8240
ANALYST Greg Lantrip, 08/06/91 AT 1301
UNITS mg/L

PARAMETER	RESULTS	DETECTION LIMIT
Benzene	<0.05	0.05
Carbon tetrachloride	<0.05	0.05
Chlorobenzene	<0.05	0.05
Chloroform	<0.05	0.05
1,4-Dichlorobenzene	<0.05	0.05
1,2-Dichloroethane	<0.05	0.05
1,1-Dichloroethylene	<0.05	0.05
Methyl ethyl ketone	<5.00	5.00
Tetrachloroethylene	<0.05	0.05
Trichloroethylene	<0.05	0.05
Vinyl chloride	<0.05	0.05

Approved By: Charles M. Johnson

Citation Corporation
Control # 26856, page two

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

METHOD 8270

ANALYST Greg Lantrip, 08/09/91 AT 1334
UNITS ug/L

PARAMETER	RESULTS	DETECTION LIMIT
o-Cresol	<0.05	0.05
m,p-Cresol	<0.10	0.10
Cresol	<0.05	0.05
2,4-Dinitrotoluene	<0.05	0.05
Hexachlorobenzene	<0.05	0.05
Hexachloro-1,3-butadiene	<0.05	0.05
Hexachloroethane	<0.05	0.05
Nitrobenzene	<0.05	0.05
Pentachlorophenol	<0.05	0.05
Pyridine	<0.05	0.05
2,4,5-Trichlorophenol	<0.05	0.05
2,4,6-Trichlorophenol	<0.05	0.05

Approved by: Charles M. Hanson

DISCHARGE OF STORM WATER, NONCONTACT COOLING WATER, BOILER BLOWDOWN, COOLING TOWER BLOWDOWN ASSOCIATED WITH CASTING AND MOLDING, METAL FINISHING, FABRICATED METAL PRODUCTS, INDUSTRIAL COMMERCIAL MACHINERY, ELECTRONIC EQUIPMENT, TRANSPORTATION EQUIPMENT, AND MEASURING AND ANALYZING INSTRUMENTS; INCLUDING DISCHARGES GENERATED AS A RESULT OF THE HANDLING AND STORAGE OF PETROLEUM AND ITS DERIVATIVES ALSO ASSOCIATED WITH ABOVE LISTED ACTIVITIES

1731 LINDSEY DRIVE
Montgomery, Alabama 36130

FOR OFFICE USE ONLY

NPDES PERMIT NUMBER

FACILITY NUMBER

READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY BEFORE FILLING OUT THIS FORM

ANSWER ALL QUESTIONS ON ATTACHMENT SHEETS

IF REPLY SPACE IS AVAILABLE TO ANSWER ANY ITEM BELOW PLEASE CONTINUE ANSWER ON AN ATTACHED SHEET OF PAPER

FACILITY IDENTIFICATION INFORMATION

A. Name of Facility to be shown on Permit

CITATION FOAM CASTING CO.

B. Mailing Address of Facility - Street Route

P.O. Box 330

City, State and Zip Code

County

COLUMBIANA, AL 35051

SHELBY

C. Location of Facility

130 INDUSTRIAL PARK ROAD, COLUMBIANA, AL

D. Facility Contact Person and Title

BRAD BEARDEN, MAINTENANCE MANAGER

Telephone Number

(205) 669-5700

E. Standard Industrial Code (SIC) (Name & Code)

3321 - GRAY AND DUCTILE IRON FOUNDRIES

F. Description of industrial activity and land use at the facility.

DUCTILE & GRAY IRON FOUNDRY

G. Check the type discharges at your facility and complete applicable sections associated with the type checked.

- ☒ 1. Storm water
☒ 2. Noncontact cooling water and/or boiler blowdown
☐ 3. Petroleum bulk storage storm water
☐ 4. Process waters (includes all wash waters) and hydrostatic test waters

H. Please indicate which, if any, of the discharges in G. are combined.

STORM WATER & COOLING TOWER BLOWDOWN COMBINED IN ONE OF THE TWO OUTFALLS.

I. Has the facility been issued an NPDES individual wastewater permit? NO NPDES Permit No. AL

You may hold ONLY one (1) NPDES permit per facility. Do you intend to replace your individual permit with this General Permit?

J. Is this Notice of Intent for (circle one):

1. First time issuance of a GENERAL Permit.
 2. Renewal of GENERAL Permit Number AL0

K. Are any of the discharges that you intend to be covered by this permit going to a municipal storm or sanitary sewer?

NO.

L. Name of surface water to which the Municipal storm sewer discharges.

N/A

M. Have you notified the municipality by letter as required by the permit?

N/A

N. Date facility started or will start operations.

APRIL 1990

O. What is the size of the site in acres?

7.4 ACRES

SECTION - STORM WATER FROM FOUNDRY MOLTLE

A. List latitude and longitude (to seconds) and receiving stream:

1. Latitude 33°11'00" N Longitude 86°37'07" W
 Receiving stream TRIBUTARY OF TOWN CREEK

2. Latitude 33°11'02" N Longitude 86°37'08" W
 Receiving stream TRIBUTARY OF TOWN CREEK

3. Latitude _____ N Longitude _____ W
 Receiving stream _____

4. Latitude _____ N Longitude _____ W
 Receiving stream _____

B. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Attach a copy of analysis. NO.

C. Storm water runoff discharges to: (circle one)

1. Surface water 2. Soaks into the ground 3. Municipal storm sewer

D. Are any foundry sands disposed of on site? NO. If so list the outfall(s) from A. in this section that contains the storm water.

(SENT TO COUNTY LANDFILL)

E. Have the foundry sands been shown to be nonhazardous as required by ADEM Administrative Code 335-14-02-037 YES

F. Are any raw materials, finished products, waste products or chemicals exposed to storm water currently or in the last three years? If yes, list:

YES, SPENT FOUNDRY SAND.

G. Were there any past industrial activities on the site that would contribute to the present storm water pollution? If yes, please explain.

YES, FOUNDRY SAND WAS DISPOSED ON SITE, BUT THE PRACTICE WAS STOPPED.

H. Briefly describe your operations.

"LOST FOAM" MOLDING PROCESS TO MAKE GRAY & DUCTILE IRON CASTINGS.

I. Is your industry a guideline industry that would fall under the Federal Guidelines listed below:

- 40 CFR 412-Electroplating 40 CFR 433-Metal Finishing
 40 CFR 464-Metal Molding & Casting 40 CFR 465-Coil Coating
 40 CFR 466-Polymer Processing
 40 CFR 489-Electrical & Electronic Components
 40 CFR 467-Aluminum Forming Point Source
 40 CFR 468-Copper Forming

F. Known impact on receiving water? If yes, to what extent?

NONE KNOWN

SECTION - STORM WATER FROM EQUIPMENT WASHING & MAINTENANCE AREAS

A. List latitude and longitude (to seconds) and receiving stream:

1. Latitude _____ N Longitude _____ W
Receiving stream _____

2. Latitude _____ N Longitude _____ W
Receiving stream _____

3. Latitude _____ N Longitude _____ W
Receiving stream _____

4. Latitude _____ N Longitude _____ W
Receiving stream _____

B. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Attach a copy of analysis

C. Storm water runoff discharges to: (circle one)

1. Surface water 2. Soaks into the ground 3. Municipal storm sewer

D. Does the facility have any of the following control measures to prevent pollution?

1. Structural control measures (basins, etc.)
2. Management practices (cleaning measures, runoff prevention)
3. Treatment of storm water (retention, sorption)

E. Briefly describe any measures listed in D or others you have taken to protect water quality in the receiving stream.

F. Known impact on receiving water? If yes, to what extent?

G. Are any raw materials, finished products, waste products or chemicals exposed to storm water currently or in the last three years? If yes, list:

H. Were there any past industrial activities on the site that would contribute to the present storm water pollution? If yes, please explain.

I. Briefly describe your operations.

SECTION - STORM WATER FROM PETROLEUM STORAGE

A. List latitude and longitude (to seconds) and receiving stream:

1. Latitude _____ N Longitude _____ W
Receiving stream _____

2. Latitude _____ N Longitude _____ W
Receiving stream _____

3. Latitude _____ N Longitude _____ W
Receiving stream _____

4. Latitude _____ N Longitude _____ W
Receiving stream _____

B. List number and size of above ground storage tanks.

C. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Attach a copy of analysis.

D. Storm water runoff discharges to: (circle one)

1. Surface water 2. Soaks into the ground 3. Municipal storm sewer

E. Does the facility have any of the following control measures to prevent pollution?

1. Structural control measures (basins, etc.)
2. Management practices (cleaning measures, runoff prevention)
3. Treatment of storm water (retention, sorption)

F. Briefly describe any measures listed in E or others you have taken to protect water quality in the receiving stream.

G. Known impact on receiving water? If yes, to what extent?

H. Have any leaks, spills or other instances of storm water contamination occurred within the last 3 years? If yes, what occurred and how did it happen?

I. Are any raw materials, finished products, waste products or chemicals exposed to storm water currently or in the last three years? If yes, list:

J. Are all tanks that contain a possible pollutant diked?

K. Can dikes contain 110% of the contents of the largest tank in the dike?

L. Are the walls and floors of the dikes relatively impermeable to the stored substance?

M. Do you discharge uncontaminated storm water from the bulk petroleum secondary containment area? If so list outfall number(s) from A. in this section.

N. Is treated or untreated water from tank bottoms or water draws discharged on site?

O. Were there any past industrial activities on the site that would contribute to the present storm water pollution? If yes, please explain.

P. Does the facility handle leaded fuel?

Q. Does the facility handle aviation fuel, jet fuel, or diesel fuel?

R. Is chlorine present in any source water (i.e. city or well water) used for hydrostatic testing?

S. Are trucks fueled or tankers loaded on site?

T. If required do you have a Spill Prevention Control Countermeasure (SPCC) plan for petroleum storage at your facility?

DISCHARGE MONITORING - DISCHARGES ASSOCIATED WITH NONCONTACT COOLING WATER, COOLING TOWER AND BOILER BLOWDOWN

- A. List latitude and longitude (to seconds), receiving stream, and type of discharge (noncontact cooling water, cooling tower blowdown, or boiler blowdown):

OUTFALLS:

- Latitude 33°11'02" N Longitude 86°37'08" W
Receiving stream TRIBUTARY OF TOWN CREEK
Type of discharge COOLING TOWER BLOWDOWN (2
STORM WATER)
- Latitude _____ N Longitude _____ W
Receiving stream _____
Type of discharge _____
- Latitude _____ N Longitude _____ W
Receiving stream _____
Type of discharge _____
- Latitude _____ N Longitude _____ W
Receiving stream _____
Type of discharge _____
- Latitude _____ N Longitude _____ W
Receiving stream _____
Type of discharge _____

- B. If there are more than one of these discharges can they be sampled separately?

N/A

- C. Is there any process water commingled with the cooling and/or blowdown water?

No.

- D. If answer to C. is yes can they all be sampled separately?

N/A

- E. Is the noncontact cooling water and the cooling tower blowdown discharge less than 100,000 gallons per day (GPD)?

YES.

- F. Do you use blowdown in your cooling or blowdown water? If yes, please submit a list of them with this NOI.

NO.

*Blowdown that contains oil/solids, toxic/solids, acids, and/or chemicals are prohibited by the permit.

- G. Is your discharge located in the Tennessee or Alabama River Basin or on the Tallapoosa River between Tharlow Dam at Tallapoosa and the junction of the Coosa River and Tallapoosa River?

No.

- H. Is the boiler blowdown discharge less than 5,000 gallons per day (GPD)?

N/A

- I. Is shock chlorination used at the facility?

No.

- J. Is any source water chlorinated? If so, explain and list outfall number(s) from A. in this section.

YES, CITY DRINKING WATER USED IN COOLING TOWER. OUTFALL #1

COOLING WATER MONITORING OPTIONS

- A. Is cooling/blowdown water chlorinated from the time it enters your facility until it is discharged (city water usually contains chlorine)? Yes ___ No X

IF ANSWER IS YES, DO NOT COMPLETE THIS SECTION.

- B. If answer is no, which outfall(s) listed above under DSN004 AND DSN005 are both chlorinated AND are over 2,500 feet from point of discharge from the facility to the point of entry into the receiving stream? NO.

If you listed any outfalls in question B. you may avoid monitoring for chlorine at that outfall by:

- Submitting lab data with the Notice of Intent (NOI) that demonstrates that the chlorine concentration at the point the discharge enters the impacted stream is 0.011 mg/l or less.
- Submitting a site drawing showing the distance from the discharge point to the point the effluent enters the impacted stream.

- C. For outfalls listed in B. do you intend to exercise the no monitoring option? NO. For which outfall(s)?

If you answered yes to question C. you are certifying by signing this form, that the conditions are as stated above in this Section (Cooling Water Monitoring Options) and you are certifying that you understand that you are required to notify ADEM if those conditions change during the term of the permit.

DISCHARGE MONITORING - DISCHARGES ASSOCIATED WITH NONCONTACT COOLING WATER, COOLING TOWER AND BOILER BLOWDOWN

- A. List latitude and longitude (to seconds) and receiving stream:

- Latitude _____ N Longitude _____ W
Receiving stream _____
- Latitude _____ N Longitude _____ W
Receiving stream _____
- Latitude _____ N Longitude _____ W
Receiving stream _____
- Latitude _____ N Longitude _____ W
Receiving stream _____

- B. If there are more than one of these discharges can they be sampled separately?

- C. Is there any process water commingled with the cooling and/or blowdown water?

- D. If answer to D is yes can they all be sampled separately?

GENERAL INFORMATION

A. Attach proof of advertising to include date of publication to Notice of Intent.

Date of publication? _____

DO NOT SUBMIT SEPARATELY

B. Have you included a check for the application fee?

Yes.

C. The permit requires implementation of a Best Management Practices Plan (BMP) no later than OCTOBER 1, 1993. State status of BMP for your facility.

BEING PREPARED BY CORPORATE
OFFICE. WILL BE IMPLEMENTED
WELL BEFORE 10/1/93.

SIGNATURES

This Notice of Intent must be signed by the official representative of the facility who is the owner, the sole proprietor of a sole proprietorship, a general partner for a partnership, or by a writing signed official or other duly authorized representative for a unit of government or an executive officer of at least the level of vice president for a corporation, having overall responsibility for the operation of the facility. If the Notice of Intent is not signed, or is signed to be incomplete, it will be returned.

WARNING: I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines or imprisonment for knowing violations.

Name and Official Title (Type or Print)

HUGH WEEKS, EXECUTIVE VICE PRESIDENT

Address
P.O. Box 330
COLUMBIANA, AL
35051

Area Code and Phone Number

(205) 669-5700

Signature

Hugh G. Weeks

PLEASE COMPLETE IF NOT PREPARED BY A CONSULTANT OR SOMEONE OTHER THAN AN EMPLOYEE OF FACILITY

Name of Individual (Type or Print)

PHILLIP GRAY

Mailing Address

2 OFFICE PARK CIRCLE, SUITE 204

Name of Firm

CITATION CORPORATION

City, State, and Zip Code

BIRMINGHAM, AL 35223

Citation Permit Casting Company
 101 Industrial Park Road
 Chatsworth, AL 35705
 County Branch is requesting from
 the Alabama Department of
 Environmental Management
 authorization under General
 Permit ALO12880 for an ex-
 ception to Town Creek
 General Permit ALO12880 for
 the purpose of the Department
 to authorize discharges of
 cooling water, storm water,
 boiler blowdown, cooling tower
 blowdown associated with cast-
 ing and molding, metal finishing,
 hydraulic fluid, and other
 industrial discharges.
 machinery, electronic equip-
 ment, transportation equipment,
 and structures and auxiliary
 equipment, including dis-
 charges generated as a result of
 the handling and storage of
 petroleum and its derivatives
 and associated with above listed
 activities and certain indus-
 trial discharges to prevent the
 discharge from causing water
 quality problems in the receiving
 stream. General Permits are
 issued by the department to
 regulate existing discharges
 which were then authorized in
 the past, and new, existing
 minor discharges of storm water
 and other waste waters.
 Copies of the General Permit
 and the notice of intent filed by
 Citation Permit Casting Company
 may be inspected at the Ala-
 bama Department of Environ-
 mental Management, 1731 Con-
 stitution Avenue, 11th
 Floor, Montgomery, Alabama 36104.
 Persons wishing to comment
 may do so within 15 days follow-
 ing the publication of this notice
 by posting to the attention of the
 Chief Permit Services Divi-
 sion, Alabama Department of
 Environmental Management,
 1731 Constitution Avenue,
 11th Floor, Montgomery, Alabama
 36104.
 Date: October 2, 1992